

house+home

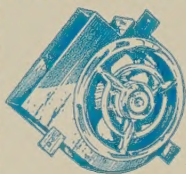
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**Design: how to get excitement through contrast** page 106

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Ventilating Fans

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17 MODELS
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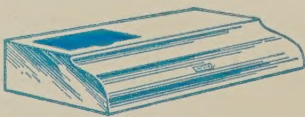
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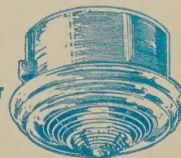


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NuTone Ventilating Fans • Door Chimes

Is a new mortgage pinch ahead?

First sign of tightening: no-down loans bring bigger discounts. No real crisis is foreseen. The big question is, will the industry try to build more homes than can be financed.

A gradual tightening of the mortgage market appeared to be under way last month.

It looked like nothing resembling the 1951 money drought—just a slow drift to slightly scarcer funds for home financing.

First signs were already apparent. No-down money was harder to find, and what was available was bringing higher discounts. Part of the shift seemed to be psychological, a reaction to talk in Washington of credit tightening (see p. 39). An unhappy result, said one NAHB staffer, was that "some people are starting to rush in ahead of the hoarders again."

Mortgage bankers in three-quarters of the cities checked each month by HOUSE & HOME (table, p. 49) agreed the money market showed signs of tightening—or already had stiffened a little. Typical comments: "Negative no-downs are getting a worse reaction, . . . although they are still being made," observed Vice President John Yates of Stockton, Whatley, Davin & Co. of Jacksonville. "I am convinced the Fed is trying to put some sort of brake on the mortgage market," said President Robert Pease of Detroit Mortgage & Realty Co. "I expect the market to get tighter gradually," said Robert S. Irving of Philadelphia's W. A. Clarke Co.

Whys and wherefores. What triggered the wave of forecasts of tighter mortgage funds? A few analysts pointed to the Treasury's 40-year, 3% bond issue as one symptom. But this move, while in line with the administration's aim of lengthening the average maturity of the public debt, was nothing like the 3½% issue of 1953 (which did help lead to tighter mortgage money). Some of the differences: 1) no new money was involved this time, 2) the issue was only available to holders of outstanding 27½ths bonds. Best informed opinion was that the new 3% bond would be absorbed without more than a ripple of effect on the flow of money into other investments.

The eye-popping rate of housing starts had a lot more to do with the outlook. January private starts reached 87,800, up 35% from January a year ago. This projected to an annual rate of 1.4 million. December starts were even higher on an annual basis. If the rate kept up, chorused mortgage men, the housing industry would build itself ahead of the money supply. Builders could take comfort, however, from the fact that annual output cannot be safely calculated from just one or two months' production, especially two months so influenced by weather. In January 1951, private starts totaled 82,200. But the year's total was only 1,020,000. In the peak year of 1940 (1.4 million starts) January contributed only 77,800.

Underlying causes. But a lot of other forces promised to tighten money in 1955.

Vice President George T. Conklin of Guardian Life Insurance Co., in a talk to mortgage bankers, cited these:

1. Short-term credit demand, which fell by \$12 billion last year, should rise again as businessmen rebuild inventories; this will lead commercial banks to lose interest in bonds, prefer short-term loans.

2. While Federal Reserve and Treasury policies were geared to stop the decline in business last year, the need for this has passed. Now, the Fed seemed to be starting to lean against expanding credit.

It is noteworthy that Conklin, who is widely regarded as one of the nation's most astute money men, thinks the natural rise in funds available to lenders will finance 1.3 million starts (perhaps with a slight rise in conventional interest rates and almost surely with higher discounts). "The danger," he said, "is that the industry may want to build a lot more than that."

Builders could also ponder a suggestion from John Dickerman, NAHB executive director: "I would suggest that in plans for '55 you do not rely blindly on predictions of continuing high home volume and continuation of present credit policies."

The mortgage weather was not yet stormy. But builders could well keep a sharp eye on the Fed and the price of government bonds for sudden squalls.

One good sign of rising interest rates is an increase in the rate on FHA debentures—used by the agency to pay off on foreclosed property. In late January, FHA upped its debenture rate from 2½ to 2⅝%, keeping it in line—as the law requires—with rates on comparable government securities.

Rep. Albert Rains (D, Ala.), meantime, introduced a bill to cut VA interest to 4%. Fortunately for building, it had little chance of passage.

FHA sued for \$27,000 for 'negligent' appraisals

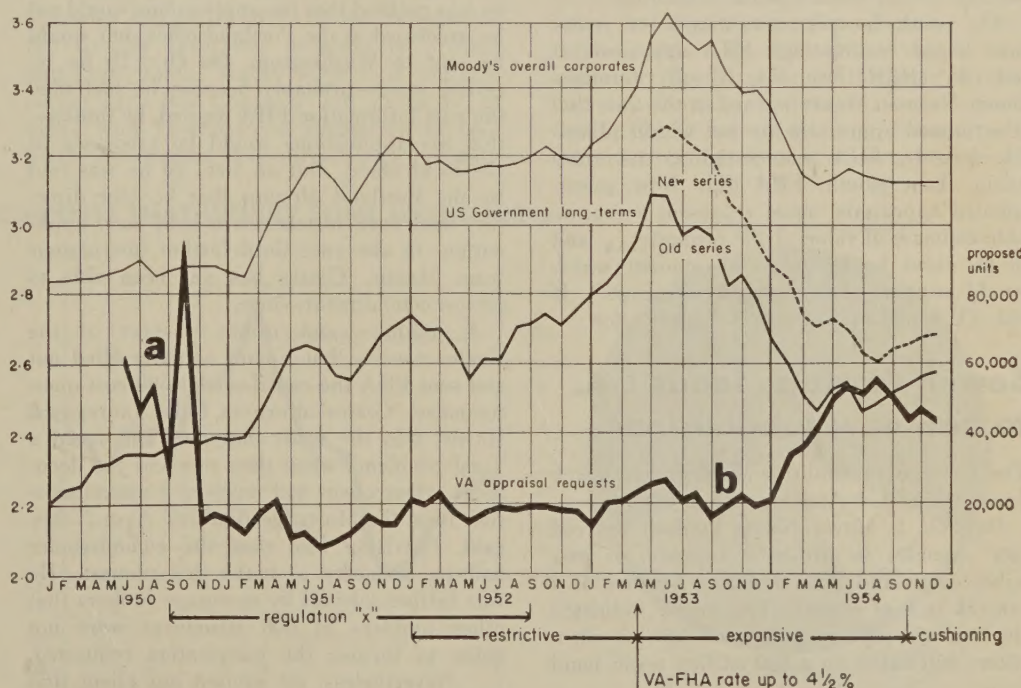
An El Paso homebuilder has sued FHA for \$27,000 damages on the ground its appraisals were "negligent" and dilatory.

The unprecedented suit also seeks a writ of mandamus compelling three local FHA officials to "perform the duties of office" (i.e. process applications) "within reasonable times and without negligence."

Builder George Hervey, brother of the mayor of El Paso, brought the suit in federal district court there against Lanham Evans, regional FHA director, and E. A. Anderson, chief underwriter, both of Lubbock, Tex., and Charles L. Coy Jr., El Paso administrative officer. Hervey charged that he and the five building corporations he heads stand to lose a \$200,000 investment (\$150,000 of it in land) plus \$200,-

(continued on p. 38)

BOND YIELDS AND VA APPLICATIONS



The relation between yields of government and corporate bonds and VA starts suggests one sensitive test builders could adopt to tell what may happen to the availability and price of mortgage credit. After pre-Reg. X bulge (a), VA appraisal requests stayed at low levels (b) through Reg. X and restrictive Federal Reserve money policy (indicated along the bottom of chart). VA volume did not soar until nine months after bond yields started down and Fed switched to expansive policy. The time lag can be considered about normal; the mortgage market shifts much more slowly than the rest of US money economy.

000 anticipated profit because of "unreasonable" delay by FHA in approving commitments on eight sets of plans for a tract of homes.

The eight plans, Hervey complained, were filed Sept. 1 with the Albuquerque FHA office. They aimed at variety with the same floor space and approximately identical price (\$12,000-\$15,000), he said. Proffered commitments varied some \$1,200. When the regional office was shifted to Lubbock Dec. 2, Hervey asserted, FHA admitted an error had been made. But FHA gave no reason for the discrepancy, said the suit, except "a lack of attention and a negligent manner of appraisal and failure to make a proper study of plans and specifications."

While the Lubbock office restudied the plans, the suit charged, it imposed a new cost index for El Paso slicing valuations some 12.3%. This had the effect of trimming commitments some \$1,200 per house. In the meantime, Hervey had taken deposits on 41 homes. Hervey asked the court to compel FHA to use its old cost index for his commitments.

FHA tightens 'escape' clause in appraisals

Industry abuses last month forced FHA to tighten up its "escape" clause in appraisals.

Congress wrote a requirement into the 1954 Housing Act that buyers must be given a look at FHA appraisals before they buy a house. At first, FHA interpreted this into a seven-day free option for purchasers to back out of deals for any reason at all. When real estate men complained, FHA modified its rules. It allowed the seller to fill in an estimate of what the FHA appraisal would be, if it had not yet been made when a sales contract was signed. If the actual appraisal turned out no lower than the estimate, the contract (usually involving an old house) remains binding.

The result, however, was that a few realty men began "estimating" FHA appraisals at only \$1 (H&H, Dec. '54, News). Commissioner Norman Mason warned at the time that if estimated appraisals are not within plausible bounds, FHA would tighten its rules again. Last month, FHA did. Now, guesstimated appraisals "must represent a reasonable estimate of value of the property . . . and in no event be less than an amount which would support the proposed mortgage." If not, FHA will not process the application.

Sewer shortage leads L.A. to ban new subdivisions

The community facilities problem has struck fast-growing Los Angeles with a jolt.

On Feb. 1, Mayor Norris Poulson ordered city agencies to withhold approval of new subdivisions and tract rezoning because of a critical lack of sewers. The mayor indicated the ban will stick at least until April 5, when voters will ballot on a \$60 million sewer bond issue.

Sewage overflows have already reached the point where, according to President Cushing Phillips of the board of public works, they constitute "the most serious health matter we have ever faced." Los Angeles' dilemma is heightened by the fact that building is the city's biggest industry.

More blacklisted 608 builders sue FHA; agency reveals new cost questionnaire

Blacklisted 608 builders are stepping up their legal counterattacks against FHA.

Two court cases involving the agency's blacklist moved ahead last month and a new one was filed. Meanwhile, FHA, having been frustrated in its effort to elicit sworn cost data from 608 builders, announced a new scheme to dig out the same facts. Sponsors of only about 3,000 of the 7,045 who received it answered FHA's questionnaire last summer—many of them on the basis that FHA had no legal right to compel the answers.

Under the proposed system, anybody applying for FHA insurance would have to fill out a form asking a load of financial and business questions, including whether he ever built any 608s. If he had built 608s, he would then have to complete another form, giving the details of costs, profits, pay scales. Failure to file the form would mean FHA would not process his application.

Slow grind. Here is how windfall litigation stood at midmonth:

In Portland, Ore., Robert Coates and Prescott Corp. obtained an order in federal district court requiring Commissioner Norman P. Mason to appear Feb. 28 and show cause why Coates and his corporation should not be allowed to do business with FHA during trial of the suit.

Coates had spent a deal of time and energy trying to find out what FHA's on-again-off-again cutoff in processing meant. He had been accused last September of making a windfall of \$75,000 on construction of Lane Tower, a 608 at Eugene, Ore. At the same time he had filed a detailed accounting of the project, he said, "showing a construction loss of approximately \$83,000." On Sept. 30 he was notified that his applications would not be processed at the Portland office, but would be sent to Washington. On Oct. 19 he received word—probably because he had filed the cost information FHA wanted, he thinks—that his applications would be processed at the local office. But on Dec. 20 he was told by the Portland director that he (the director) had been instructed to hold such applications in abeyance until further instructions from Mason. Coates has not been able to secure commitments since.

A unique—and ironic—aspect of the Coates case is that Coates actually filled out and sent FHA the controversial 608 cost questionnaire. Coates' attorneys, Cake, Jaureguy & Hardy, told the court that they had faced a "real problem" when they received the document. "Our client had received a communication from the Mortgage Bankers' Assn.," they said, "advising him that the commissioner had no authority to make this request. He was further advised by mortgage brokers that other builders of 608 structures were not going to furnish the information requested. . . . Nevertheless, we advised our client that whether the commissioner had the authority to ask for the information or not, we still thought that he, as a participant of the benefits under the National Housing Act, should comply with the request as best he could."

Parcel of quibbles. Coates complied, all right, and was still blacklisted. When he

wrote FHA to find out why, the letter was referred to General Counsel Frank Meistrell. He wrote back: "My review indicates that questionnaires were submitted in connection with the five projects, but that the questionnaires were not notarized nor did they contain the complete information required. . . ."

So the attorneys wrote Meistrell: "This is the first notification that we have ever received that the forms required notarization. . . . If the fact that these forms were not notarized is any particular stumbling block to otherwise reviewing this matter, the notarization will be accomplished immediately upon your returning the forms to us. . . ." They added that they had explained to FHA that the questionnaire had demanded cost information "in an entirely different form than was accumulated by Coates and Prescott Corp. during the construction phase" and that to fit the FHA system they would have had to make "a complete re-allocation of costs." Coates said this would require "several thousand dollars" and a lot of time.

He seemed to be suffering enough as it was. "I have been forced to almost completely suspend all of my building operations," he told the court. "Irreparable harm is being done my reputation and integrity among my creditors, business associates, mortgage loan companies and the general public. Unless the FHA either specifies written charges against me and gives me a reasonable opportunity for an expeditious hearing or reinstates me to the benefits of the National Housing Act until they can specify such charges, I face financial ruin."

Settlement in Denver. Garrett-Bromfield & Co. in Denver had been through the same sort of rigmarole with the difference that their case had been settled. When the firm received word that its applications would have to go to Washington, it threatened suit and FHA withdrew the order (H&H, Feb. '55, News). Things got ironed out during a 30-day truce period but exactly what sort of arrangements, if any, were made FHA refused to disclose.

To suggestions the company agreed to turn back any "windfall" profits (a condition that Meistrell implied in Washington last month might be a suitable settlement in a blacklist lawsuit), Donald C. Bromfield replied: "That's absolutely untrue." Erskine Myer, attorney for the firm, went further: "There weren't any windfall profits." He added: "Garrett-Bromfield made no concessions of any kind."

Another building company took its blacklist case to the law in Washington. Harry K. Madway and Partners Sam and Ralph Madway of Wayne, Pa., asked the district court for an order to force FHA to resume processing their applications. They had been accused, when doing business as Madway Engineering and Construction Co., of taking a "windfall" of \$186,500 on a development in Camden, N. J. The "windfall" accusation in the Madway case, incidentally, and also in Portland Builder Coates' case, appeared in Atty. William McKenna's famous report during his term as deputy HHF Administrator to conduct last year's investigation.

Is the housing boom getting out of hand?

White House advisers ponder how and whether to put on the brakes. Eisenhower's request for power to adjust mortgage credit terms faces rejection by Congress

Should brakes be put on the housing boom?

The question has ballooned up out of nowhere in two months, spurred by whopping high starts in December and January (see Statistics, p. 49) and by the awakening realization that homes are being built perhaps a third faster than new families are being formed to fill them (graph, below).

Enough debate over how and whether to curb VA and FHA starts had arisen in Washington last month to indicate there may well be an agonizing reappraisal of the liberal terms of the 1954 Housing Act so dear to homebuilders. Some evidences:

► Both the Federal Reserve and the President's Council of Economic Advisers were pondering whether the new law threatens to produce more housing than the nation can absorb. The council, in fact, held a seminar on the subject, with attendance limited to government economists. HHFA and FHA officials were called in, asked to justify a continued high level of residential building. (They tried.)

► The possibility arose of White House action to direct VA to call a halt to nothing down mortgages. Some Washington pundits predicted such a move would be forthcoming, perhaps in about a month. (NAHB was on record as opposing inclusion of closing costs in VA mortgages—the no-no down loan—but has not gone so far as to object to 100% loans.)

► President Eisenhower, in his economic message, asked Congress for more power to vary the terms of government-backed mortgages “in the interests of economic stability.”

The main battle. The issue to be thrashed out in Congress—this promises to be the main battle—is not whether the brakes need to be clamped on housing immediately. It is

whether housing programs need built-in brakes. As it is now, the administration has no specific power to curb housing credit. Eisenhower asked for it last year, but Congress turned him down. The administration cannot vary the loan-to-value ratios or the maximum permissible payoff periods of VA and FHA loans. It can change interest rates only within narrow limits. VA loans are already at their 4½% ceiling; FHA loans could be hiked half a point to 5%.

It is almost certain that Congress again will reject the President's request for flexible mortgage controls. Two influential Democrats, Reps. Wright Patman of Texas and Albert Rains of Alabama, have even introduced bills to cut interest rates to 4% on VA loans. Rains would buttress this attempt to legislate the price of mortgage money by giving VA an almost unlimited blank check on the US Treasury for direct loans. If lenders balked at 4% loans, he would have the Treasury tap up to 20% of the reserves of the GI life insurance program to provide mortgage funds. Rains' scheme is unlikely to get far. But Congress will probably go along with Eisenhower's suggestion to continue the existing VA direct loan program

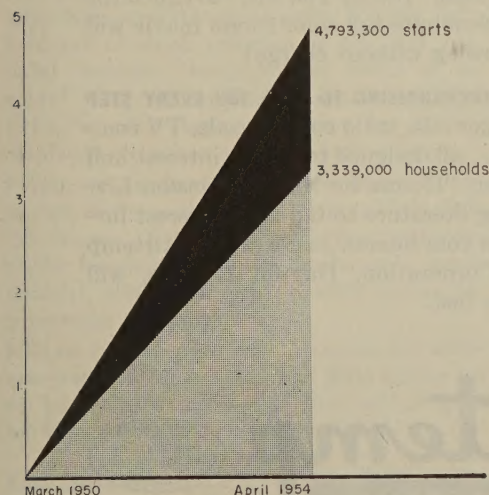
(\$25 million per quarter for loans in so-called remote areas).

Ways & means. Many an official and industry expert agrees that the question of controlling the boom through new credit powers is academic, anyway. They argue that both FHA and VA have enough administrative leeway to tighten up if they choose. FHA, for instance, could resort to its old trick of shading appraisals. That is what former FHA Commissioner Raymond Foley used to call “downward pressure” on prices. He used the same approach as HHFA administrator. Some technicians think FHA has power to trim the loan-to-value ratio for its loans—administratively. This would be harder for VA, because it uses fee appraisers.

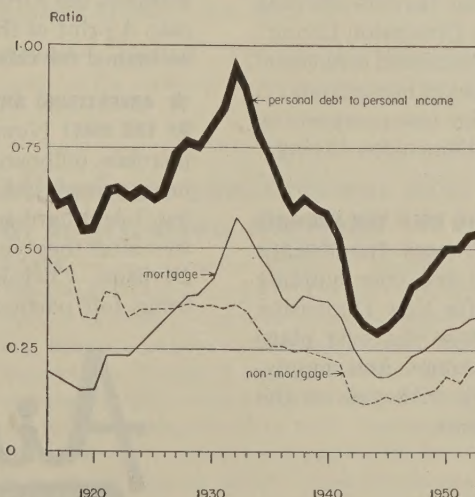
On the record so far, neither HHFA administrator Cole nor FHA Commissioner Norman Mason are worried about the burst of housing touched off by the new Housing Act. Before the House banking committee (to testify on a measure upping FHA's insurance authority \$1½ billion so it will not run out of gas in April), Cole insisted the US economy can absorb 1.3 million units of new housing “very well” for several years. Mason declared there is no oversupply of single-family homes.

The problem that top-drawer government men face in pondering the implications of the 1955 home bulge was summed up last month by a highly placed economic expert. Said he: “We're as squeamish as any banker about loans where a man has no stake at all in his home. He becomes merely a tenant, and you would think he would be glib about turning the house back to the government. But it hasn't worked out that way. Even the no-down houses have shown surprising stability as investments. The alarming implications involved in such ventures simply have not occurred. I'm surprised that they haven't, but they haven't. A little equity is a good thing. But if we raised requirements, we'd cut out a lot of demand.” (continued on p. 41)

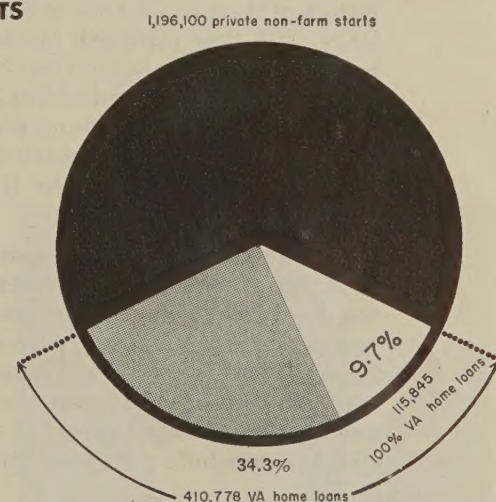
THESE ARE SOME OF THE STATISTICAL SIGNPOSTS THAT WORRY SOME ECONOMISTS



FAMILY FORMATION, averaging about 850,000 a year, has lagged behind starts since 1950. Census statistics on it are poor, however, and the year-to-year figures cited with alarm in some quarters are not reliable.



MORTGAGE DEBT is at an all-time high, but it has a long way to go to reach the 1929 ratio of debt to income. Besides, it is in sounder shape. Interest rates are lower. Amortization is almost universal. Second mortgages are few.



NO-DOWN LOANS amounted to 9.5% of all private starts last year and 28.2% of all VA starts. But this was only 3.3% of total mortgage recordings, which include refinancing and loans on existing houses resold.

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Statistical wilderness. One of the underlying reasons why the experts were so divided over whether housing was booming too much was an appalling lack of sensitive statistics. Treasurer Walter Hoadley Jr. of Armstrong Cork Co. put the houser's dilemma bluntly last month in testifying before a joint Congressional committee considering whether to recommend \$965,000 more for federal construction figures. Said he:

"What significance is to be attached to current reports by BLS that nonfarm housing starts are at an annual rate of over 1.4 million while new households, as estimated by the Census Bureau, are now less than 800,000 per year? Is the new homebuilding industry and hence the nation facing serious trouble? Is credit too easy? In many respects, the key to future new homebuilding lies in the vacancy rate and in the trend of value of older homes. Yet almost no trustworthy information on either subject is now available. This should be a matter of grave concern for government which has the greatest influence upon, as well as stake in, housing. How present housing laws and credit policies can be properly administered in the face of these statistical deficiencies is at least a very open question to me."

Administration asks minor changes in Housing Act

Congress is getting ready to tackle a list of relatively minor changes in the 1954 Housing Act.

The industry, meantime, is studying fresh long-range proposals for improving federal housing policies (see below and Round Table, p. 112). Most of them are aimed at easing the government out of its more-and-more pervasive control of the \$20 billion housing economy, in fear that complete regimentation is in the offing.

President Eisenhower and HHHF Administrator Cole have asked Congress to:

► Raise **FHA's** mortgage insurance authorization \$5 billion to meet estimated requirements through June 30, 1956. Extend FHA's Title I repair program which expires June 30 and remove the \$2,500 limit on FHA-VA home repaid or improvement loans by federal savings and loan associations. Clarify the \$5 million mortgage limit on FHA multifamily housing loans (subject of much criticism in the 608 scandals) because "congressional intent is not clear." End cost certification requirements for FHA Sec. 221 (low-cost housing for families displaced by urban renewal, highways, etc.).

► Approve another 35,000 **public housing** units in each of the next two fiscal years (H&H, Feb. '55, News). Relax last year's law restricting public housing to families displaced by urban renewal, slum clearance or other public improvement programs.

► Boost capital grant authorizations for **urban renewal** by \$500 million. The \$500 million set up by the Housing Act of 1949 will be gone by the end of June.

Can industry take over FHA? While the administration was struggling to make government's present involvement in housing work better, both NAREB and NAHB began thinking about whether FHA could be converted to a private corporation operated by businessmen. Henry G. Waltemade of New York,

NAREB's newly installed president (photo at right), admitted the job would be difficult. But he said he would push studies "to see if we can have business participation and responsibility in the direction of FHA, in which private enterprise can not only serve a wide market, but also participate in risk so that our industry will not become a dependency of government

Builders strive to push trade-in systems, overcome consumers' 'lack of education'

Trade-in merchants have just begun to fight.

Taking old houses in trade would seem as logical a process as trading old horses or old automobiles. But except in a few special instances it has not worked out that way. There is one major rub. It can be erased, say some builder-traders, only through "years of education of the home owner." The rub is that the home owner is extremely likely to hold out for an unrealistic price on his old home and thereby block a successful trade.

"The biggest stumbling block so far to trade-ins," according to Irving Rose, president of Edward Rose & Sons of Detroit, "is that people are accustomed to losing something for the convenience of a trade in the automobile field, but so far are not similarly disposed in housing."

Lay it on the line. There are ways to buck this situation and a lot of builders are going more deeply into trade-in this year than they have in the past. Builders who took 20 trades last year say they will take 40 this year. Attendance at the trade-in discussion panel at the Chicago NAHB convention topped 300, far beyond expectations. The sum total of trades compared to new house sales, however, is still tiny. Piecing together problems and answers brought up in Chicago with interviews in the field, the builders' line of attack on the trade-in practice becomes clear.

"Don't kid yourself; if you go into trade-ins it's going to take money," says Irving Rose. "How much depends on the type of trade-in deal, the volume, what kind of financing is to be obtained locally. If a rule-of-thumb of some sort is necessary, I would figure about 25% of the dollar value of the houses you expect to own at any one time, the balance to be financed in some other way."

Dealer's choice. The fact that Rose has been in the trade-in business for less than a

supported credit." He added: "I am fearful if something is not done along these lines, government may gradually use FHA as a vehicle to control the prices of homes."

NAHB was on record as urging that FHA's name be changed to the Federal Mortgage Insurance Corp. (as are participants in the Round Table, p. 112).

year is indicative of the fact that the practice is still new. John Worthman of Ft. Wayne has been taking trade-ins for 31 years (and now takes trade-ins on trade-ins) but he is a notable exception to the average builder striking off into the field and learning as he goes.

Experiences in how much money it takes to get started vary widely. Builder Robert Snowden of Memphis, for example, feels that \$10,000 extra capital should be enough. Jamar Adcock of Monroe, La. organized a corporation to handle old houses as trade-ins and reports that at no time did he have more than \$35,000 in the corporation. (He traded for 50 old houses last year.)

Merchandising tool. Builders go into trade-ins, of course, to boost sales of new houses. Snowden believes little cash is necessary to start a program because "most of the equity in trade-in should be profit in new houses." He observed recently: "There's no such thing as a new trade-in system. In our business, the most important thing is to have someone buy our house." His trade-in score for the past two years: 35 houses. On the other hand Rose, who has effected about a dozen trades in a year (he has made a broad estimate that he will effect between 50 and 100 this year), is adamant in believing that a trade-in program must be profitable. "We believe that you cannot expect to invest money in trade-ins without trying to make a profit," he said last month, "since obviously an investment of any consequence in used houses means a lesser amount of money to invest in building new houses and thus, of course, a potentially lower volume. Almost all the builders I have talked to so far figure on a margin of approximately 5% of the value of the used house. We ourselves will pay 90% of the FHA valuation of the house, or 95% of the

(continued on p. 43)

Midwinter conferences aim at legislative changes

NAREB, at its midwinter directors' meeting in Washington, installed Henry Waltemade of New York (r in photo at right) as president, succeeding Ronald J. Chinnock of Chicago (l). They honored Ann Turner, 17 of Richmond, Va. (c) for winning NAREB's annual essay contest of "What the Bill of Rights Means to Me." The realtors approved a \$5 dues increase, budgeted \$25,000 for their "Build America Better" rehabilitation program, opposed flexible mortgage control power for the President, urged continuation of the Wherry Act.

The US Savings & Loan League, meeting about the same time, endorsed flexible mortgage powers, urged Congress to extend the Title I prin-



ciple of co-insurance to all FHA programs. President Howard Edgerton expressed concern over "inflationary tendencies" of 1954 Housing Act.

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market value, less \$750. If you figure 5% as a sales commission, our margin is only 5%, or \$750."

The market place. Question of whether to get FHA or VA financing on an old house is also up in the air. Worthman does not use it. Rose figures a deal should be made within a week and cannot get an FHA appraisal that fast. Adcock, on the other hand, says that in Shreveport he can get an appraisal in five days. The value of government insurance is obvious: FHA's 85% loan under the new Housing Act is one boon. The other boon, as explained by Adcock: "The biggest problem is how to sell the old house. The answer, in the South, is a 100% mortgage for 30 years."

So the problem is how to get the new-home builder into a working relationship with the old-house owner who wants to buy. Realtor Mal Sherman of Baltimore went into a huddle with his associates on this recently. He concluded: "The trade-in program could be best worked by an intermediary organization formed to act as a go-between for the builder and the home buyer. Most builders do not in any way relish taking a house in trade against the new houses they are attempting to sell. They feel that this is merely substituting one headache for another."

Long, hard fight. Sherman says that putting such an "intermediary organization" to

work has been "very tough." He and four builders formed Trade-In Homes, Inc. in Baltimore a few months ago, working closely with the Multiple Listing Bureau of Baltimore. (Sherman is chairman of the Real Estate Board's MLB.) When prospective home buyers call the office, Sherman advises them that the company of Mal Sherman, realtor, will send one of its salesmen to the house to place as realistic a market value as possible on the home and then multiple list it with the 122 members of the MLB. The home owner gives Mal Sherman, realtor, \$20 for a pre-sale FHA appraisal. When the appraisal comes through, a second meeting is held with the home owner, who is then given a guaranteed upset price at which Trade-In Homes, Inc. agrees to purchase the home.

"This price is usually 15% below the FIIA appraisal," says Sherman. "The 15% is based upon the fact, first, that the used home market is most difficult at present. Home owners are unrealistic as to their asking prices, do not recognize depreciation factors, do not look on depreciation as they look upon depreciation of an automobile. . . . The 15% is based also on the fact that, if Trade-In Homes, Inc. buys his home, the home owner no longer needs to pay Mal Sherman, realtor, a 5% commission for selling the home. Furthermore, Trade-In Homes, Inc. must settle the house and pay settlement fees, do some redecorating and

minor renovating, take a mortgage on the home, make payments on the mortgage and resell the home. In addition, to be realistic, the greater proportion of the used homes often sell at a figure lower than the FHA finds them to be worth."

Row to hoe. Sherman found it difficult to get his program steaming. There was no shortage of answers to his ad; it was when negotiations for sale started that deals broke down. So he and friends are now working up a new system. He wants to develop an underwriting organization that could give a builder a firm commitment on sale of the old house—and thereby a guarantee that the new house would be bought—for a fee of \$200.

The fact that Sherman and others are approaching the trade-in business with a hard-headed realization that it is not a simple thing promises growth. Sherman feels that the "sale of new houses does not yet depend on the sale of the old home." But he thinks success can come only through "a tremendous amount of education." Detroit's Rose believes that the stumbling block—"home owners know there are advantages to trade-ins but they do not want to pay anything for the conveniences involved"—can be removed. "As trade-ins get more and more publicized," he says, "I believe this barrier will disappear and that trading will really come into its own. . . ."

SIDELIGHTS

Aesthetics v. private rights

The US Supreme Court decision (H&H, Jan. '55, News) approving eminent domain to seize private property for "aesthetic" reasons has raised worries in realty circles. Executive Director Max S. Wehrly and General Counsel Robert S. Caviness of the Urban Land Institute think it has an "ominous ring" to "anyone who cherishes the concept of individual rights." In the December "Urban Land" bulletin, they forecast the decision "points toward . . . the day when government can seize and have rebuilt any area of a city which it decides is not up to its definition of par." The American Real Property Federation, meanwhile, has called the ruling "a threat to individual property rights." NAREB, at its winter directors' meeting, urged Congress and state legislatures to limit condemnation powers so as to ban their use for aesthetic purposes.

Fir plywood gains

Per capita annual use of Douglas fir plywood has zoomed from about 10 sq. ft. at the end of World War II to an unprecedented 23 sq. ft. The Douglas Fir Plywood Assn., which compiled the figures, says they "reflect inroads fir plywood is making against competitive materials in building."

Vanished circus site

City land scarcity has struck a blow at the Ringling Bros. circus. Contracting Agent Leon W. Pickett disclosed that a two-week search for a Baltimore site suitably large, dry and near a railroad proved futile. The previous site has been sold for housing.

Squeeze on painters

Painting and decorating contractors, forced from much of the home repainting field by do-it-yourselfers, are turning to commercial work in such numbers that competition is growing rugged. Most delegates to the New Orleans convention of the Painting & Decorating Contractors of America last month seemed inclined to shrug off competition from the do-it-yourself painter. "May as well fight a windmill," commented Vice President George A. Steinheimer of Omaha. But Steinheimer and other paint men agreed 1955 will see more bidders on paint jobs than ever. "Contractors have built up big organizations and they need contracts. They'll be figuring closer," says Steinheimer. Adds Herb Hart of Chicago: "Competition is murderous on some jobs."

William Gelfan of Los Angeles, re-elected PDCA president, thinks the do-it-yourself movement may have upped the market for paint contractors by making the public more aware of painting and decorating. He puts membership at 7,800 (up 400 from a year ago), thinks it may go to 10,000.

Prefab output up 33%

Prefab home manufacturers produced 33% more houses last year than the year before. The Prefabricated Home Manufacturers' Institute reported 1954 shipments reached a

record 77,000 houses. This compares with 55,000 in '53 and 57,000 in '52 (the old record). Last year's lusty prefab growth far surpassed the 10% rise in all nonfarm housing starts.

Research village in furniture

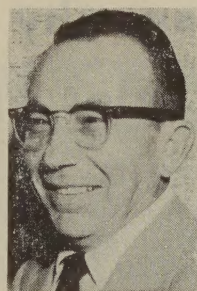
Civic groups in Grand Rapids, Mich., with a hearty endorsement from NAHB, are planning to put up the largest group of experimental houses in the country. Purpose: to show a wide range of furniture styles in a wide range of architectural settings. Homes on the 80-acre site—they will be unoccupied, for exhibit only—will vary from Cape Cod to experimental in a variety of prices.

"One way or another it will be financed," said A. C. Hitchcock Jr., Grand Rapids architect and furniture designer. "We haven't firmed it up yet, but we're going ahead full steam with the civic pride and support we have." Hotel Owner Jason L. Honigman is one of the main backers. Plans for the project have been cooking for the past couple of years with the sponsoring NAHB Research Institute.

FHA backlog (cont'd)

FHA's backlog of unprocessed applications rose slightly in January (to about 50,000 units v. 49,400 at year's end). Spokesmen said processing delays on new homes were averaging about a month; on old houses the delay was down to an average three weeks. Congress having voted FHA a \$5.4 million deficiency appropriation, the agency was recruiting 1,000 more field men to tackle the big job (a six to eight week pileup in Los Angeles, for example).

(NEWS continued on p. 45)



GELFAN

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FHA issues underwriting rules for Sec. 220 but experts fear renewal tools are too dull

FHA finally got around to sending out its first instructions on underwriting Sec. 220 loans last month.

It was, most housing experts felt, a reasonably empty gesture. NAHB leaders had been warning since last fall that Sec. 220 almost certainly will not work the way Congress wrote it, chiefly because cost certification requirements would compel too much long-term equity investment in risky rental property.

FHA's administrative interpretations made it even more likely that only a trickle of 220 loans would be made. Not a single one had been made when this was written, despite the fact that Sec. 220 is a keystone of the Eisenhower administration's efforts to bring more private initiative into slum clearance and urban redevelopment.

'Nobody knows how.' Said one discouraged official: "Nobody has a 220 commitment yet. Nobody even knows how to get one." It has taken FHA six months since the 1954 Housing Act was passed to get its first rules written for Sec. 220 principally because of a long wrangle with HHFA over procedures for preparing and handling applications. To understand the hassel, consider the background.

Under Sec. 220, Congress sanctioned FHA mortgages in old neighborhoods where cities promise to move against decay. These are areas which FHA would normally avoid. Sec. 220 can cover either new construction or remodeling. To make sure proceeds of refinancing are not diverted, the law stipulated that at least 20% of such funds must be used for repairing or improving the property.

The law provides that HHFA must certify an urban renewal area before FHA goes in with Sec. 220 insurance. Before HHFA will certify an urban renewal area, the city in-

volved will have to qualify with a "workable program" for stemming the spread of blight. This includes items like a comprehensive system of housing and building codes, a land-use plan and zoning ordinance, administrative authority *really* to enforce codes, wide community participation, and a pledge to put up city cash for needed street, sewer and park improvements.

It is here that HHFA's Urban Renewal Administration and the FHA argued longest. Urban renewal officials are willing to call a program "workable" and approve preliminary loan assistance if a city adopts an over-all plan for tackling its slum problem and promises to put itself in further shape to do the job within a definite period. (Sample: a housing code by the end of this year.) Thus a "workable program," as Renewal Commissioner James Follin observed recently, can easily constitute "nothing more than seven promises."

Added safeguards. FHA thinks local governments should be nailed down much more definitely. It is insisting that cities set up an official agency to ride herd on the over-all program to upgrade blighted areas. It will insist on a detailed survey of the area where Sec. 220 loans are sought. And these areas, FHA has told its field offices, will have to be big enough in themselves or so adroitly lo-

cated as to escape the "depressing effect of neighboring substandard areas." Small areas seeking 220 loans, FHA thinks, should either be next to a neighborhood good enough to qualify for 203 and 207 loans, or lie beside a major commercial district, public lands, parks, civic center, freeway or boulevard which gives them a boost.

FHA will also insist that cities commit themselves to a six-point plan for neighborhood improvement. FHA's rules are a lot stiffer than HHFA's:

1. To bar inharmonious land uses, FHA will require codes and covenants that guarantee "continuing residential utility" of renewed neighborhoods. Existing, but detrimental uses will have to be abandoned, restricted or isolated.
2. The city will have to take steps to upgrade "physical and social attractiveness" of renewal areas, perhaps through better street design, better landscaping of public areas.
3. Civic, social and commercial centers will have to be "adequate." Says FHA: "Assurances should be had that recreation facilities, playgrounds, theaters will be available, preferably both indoor and outdoor."
4. Cities will have to commit themselves to provide adequate mass transit for Sec. 220 areas.
5. Streets and other utilities will have to be redesigned and rebuilt, if necessary, to assure adequate through traffic routes, ample parking, drainage.
6. Assessed valuation of rehabilitated neighborhoods must be kept in relation to their real market value. Warns FHA: "Pyramiding of assessed values by adding to an existing exorbitant base an increase to cover rehabilitation costs, repairs, etc., may result in an

(continued on p. 47)



Poor street repairs jeopardize New Orleans rehabilitation program, leaders warn

These two New Orleans streets, both in areas where property owners have been falling in line with the city's slum rehabilitation drive, have a lesson to teach the nation about urban renewal. The lesson: inertia at city hall (inertia is the trademark of most city halls) can wreck a renewal program despite cooperation of other citizens.

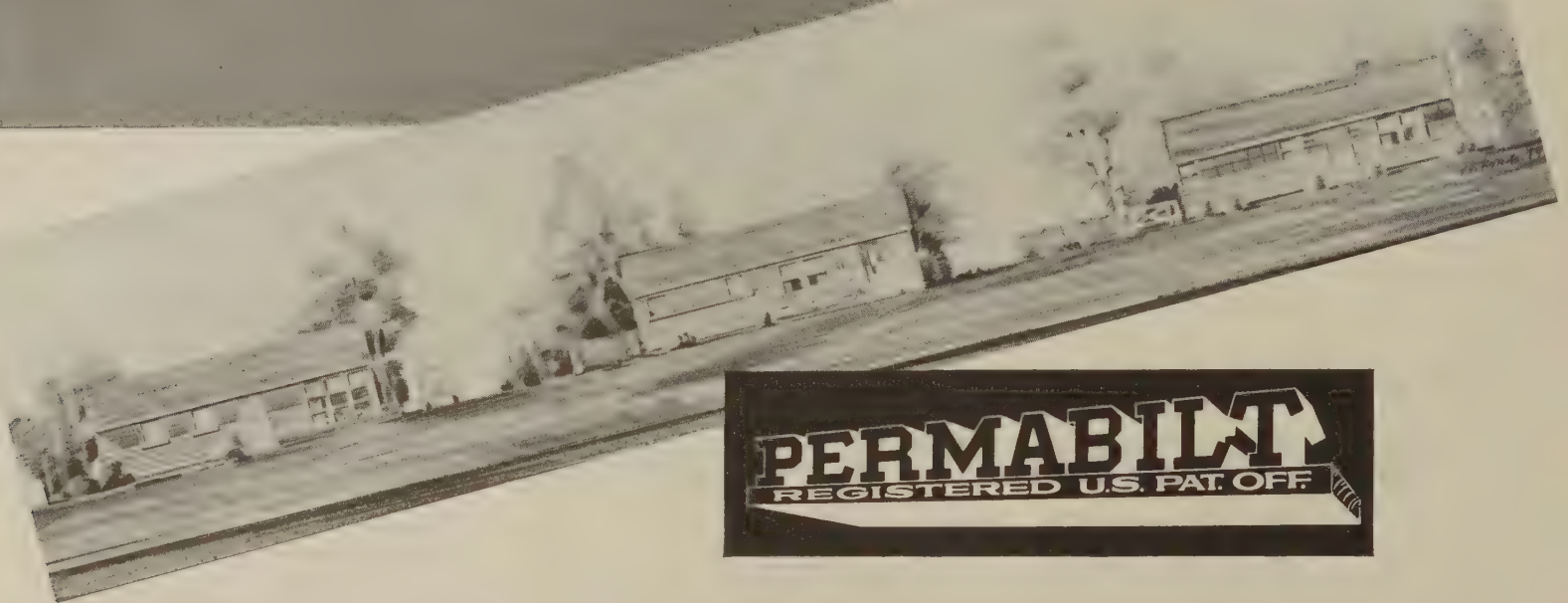
The problem in New Orleans was so acute that Clifford F. Favrot, head of the citizen's advisory committee for rehabilitation, publicly warned the city council that New Orleans' much-heralded fixup drive was being jeopardized "by lack of city improvements to keep up with the improvements being made by the home owners." He called the

lack of interest displayed by the city council "a great hazard to the future success" of renewal.

In the 2600 block of Conti St. (right photo)—area of the pilot program (H&H, Nov. '53, News)—most houses have been rehabilitated and the rundown one at the left was under repair. But lack of curbs left edges of the street a watery eyesore. In the 1100 block of Bordeaux St. (left photo) houses in the right background have been painted and repaired since the photo was taken, but paving and sidewalks are still the same. Despite such problems, HHFA has given New Orleans a \$65,438 planning advance for renewal in another area.



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assessment higher than that for other residential areas."

Outlook: bleak. None of the nine communities that have received "workable program" approval so far has been designated for Sec. 220 aid. In view of FHA's realistically stiff requirements, it is easy to see why.

On top of the stiff requirements for cities, FHA underwriting rules were resulting in hopelessly low mortgage commitments for at least some would-be Sec. 220 sponsors. Sample: the Passaic (N. J.) Redevelopment Agency, planning a 160-unit housing project on a former slum site, found it could get only a 62% commitment under 220 regulations if it held rentals to what local experts thought the market would stand (\$108 for five rooms). To get a commitment close to the 90% envisaged by law, rents would have to soar to \$130 for a five-room unit, according to Mortgage Broker Walter Gill. One way to make the project work, Gill thought, would be for FHA to slice its vacancy factor from 7% to 5%, cut its capitalization rate from 7½% to 6¼%. Chances were that FHA would refuse.

Will it boomerang? If Sec. 220 turns out to be the flop many housing men predict, where will the blame lie? HHFA Administrator Cole, in recent speeches, has been hammering on the theme that the building industry now has the tools it needs to attack the slum problem. "Builders who can transform a rolling field into a modern suburb can certainly change a slum into a desirable neighborhood," ex-Congressman Cole blithely told NAHB conventioners in January.

The fact is that creating a suburb on open land, often unhindered by zoning and building rules, is simple compared to repairing a blighted neighborhood. Biggest reason: blighted neighborhoods are full of entrenched interests with political power to oppose and obstruct. They usually do. Second reason: repairing a blighted neighborhood requires almost miraculous cooperative effort by citizens involved and city hall politicians. Rolling fields, on the other hand, do not vote, connive, delay or fall to quarreling.

Thoughtful building men fear Cole and other administration spokesmen are doing private housing a grave disservice by fostering the impression that the 1954 Housing Act perfected the tools to wipe out slums. The tools are not yet sharp enough to cut into the problem. When the public discovers, a few years hence, that nothing has happened, the reaction could well submerge private housing in a torrent of publicly-subsidized construction.

Milwaukee plans to balk urban renewal 'windfalls'

A scheme ostensibly designed to prevent "windfall profits" in urban renewal has been hatched by city officials and public housers in Milwaukee.

Executive Director W. E. Perrin of the Milwaukee Housing Authority and Harry G. Slater, first ass't city attorney, sent these proposals to Milwaukee's Socialist mayor, Frank P. Zeidler:

1. Instead of outright sale of land for redevelopment, the city should lease it "wherever possible" to permit "periodic reviews" of both land use and income.
2. If developers balk at leases, the city

should retain veto power over subsequent resale of redevelopment land. "It may appear advisable to include provisions which would require a purchaser of land (for redevelopment) to offer it for resale to the city within a period of years before it can be disposed of to other persons," they suggested. "In this way, some elements of speculation may be eliminated."

Zeidler told HOUSE & HOME the suggestions will be incorporated in Milwaukee's blight elimination program, probably after a fight.

Perrin, who last month spurned a proffered \$15,000-a-year job in Indiana to keep his \$10,672 Milwaukee post, commented: "The next six months will be crucial [in showing] whether slum clearance as a cooperative effort of government and private enterprise can be made to work here."

If Perrin prevails with his theory of subjecting urban renewal to local political control of profits, housing experts agree he will prevent windfalls. He may also prevent urban renewal. Much renewal involves rental housing, which is already an unattractive investment. The experience of Metropolitan Life Insurance Co., (which had to go to court to compel New York City to live up to its contract providing for 6% return on its investment in slum-clearing Stuyvesant Town) is widely regarded as a red flag warning investors to steer clear of housing deals where local politicians can exert residual controls over profit.



Contest demonstrates profit in housing rehabilitation

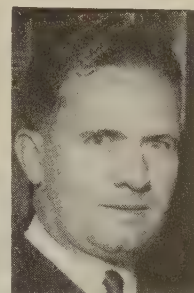
A nationwide contest sponsored by NAREB provided a fresh demonstration last month of the economic feasibility of rehabilitating housing. The old Louisville mansion pictured above, which was transformed into 14 two-bedroom apartments and five one-room units was picked as the best rehabilitation of an apartment building. Realtor Flora K. Tierney, given the job of advising an out-of-town owner whether to tear down the old 36-room house (it had been converted to a rooming house in 1886) or bring it into compliance with local housing laws, decided modernization would be profitable. A complete overhaul included a new roof and gutters, pointing up masonry, repainting, rebuilding porches, steaming off old wallpaper and repairing interior plaster, replacing much wiring, installing hot and cold running water, substituting gas heat for coal stoves. The cost was \$12,190, but the structure now returns its owner some \$3,600 a year more rent (see tables below).

Other winners: Edward Roodberg of Los Angeles, best rehabilitation of a single-family

Judge urges new agency to chop debt on tenements

Chief Magistrate John M. Murtagh of New York City last month suggested a bold plan for taking the profit out of slum ownership.

For ten months, Murtagh has struggled with Manhattan's overwhelming slum problem as presiding judge of its housing and building



MURTAGH

man decency."

To chop the debt structure of tenements, Murtagh proposed an amendment to the state multiple dwelling law to let a city administrative agency investigate any case where there was "a showing" of improper maintenance. The agency would find the "fair market value" of the building, and the financial structure would then be modified to cut the mortgage debt to 50%. Junior liens clearly "underwater" would be eliminated. His "drastic" remedy, Murtagh noted, follows the formula of the Public Utility Holding Company Act.

court. Said he: "There is a very definite causal relation between the slum problem and the extremely heavy debt burden on tenements.... [Financing] with three or four layers of mortgages is manifestly predicated on the assumption the property is not to be maintained in accordance with law or human decency."



detached house, for buying (for \$750) a 60-year old home, moving it 12 mi. and converting it to a California rambler (H&H, Aug. '54, News); Herman Schmidt of Washington, D.C., best rehabilitation of a small multifamily structure, for turning a group of decayed row houses into up-to-date apartments (H&H, April '53, News). The Louisville cost and rent figures:

WHAT REHABILITATION COST

| | |
|---|-------------------|
| Plumbing contract | \$3,036.60 |
| Roof, guttering contract..... | 1,725.00 |
| Electrical contract | 1,450.00 |
| Carpentry & painting contract..... | 5,327.35 |
| Ornamental iron rail, side porch..... | 185.00 |
| Concrete work | 92.25 |
| Linoleum, locks, floor paint, etc. | 294.34 |
| Labor, cleaning, etc. | 79.70 |
| | <hr/> \$12,190.24 |

HOW IT AFFECTED PROPERTY INCOME

| | Monthly rental | Water | Gas & electric |
|--------------------|----------------|-------|----------------|
| 1944 Average | 325.00 | 7.08 | 35.00 |
| 1945 Average | 433.00 | 11.08 | 43.15 |
| 1953 Average | 650.00 | 12.02 | 51.57 |
| 1954 (Nov. & Dec.) | 950.00 | 14.08 | 127.76 |

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Use where required to suspend ductwork, ceilings and pipes.

Creary Drive-it pins give you greater penetration, greater holding power and greater operating speed. They are made of high quality alloy steel and are specially heat treated to give greatest strength and toughness. It is only because of this super strength and extreme hardness that they are able to perform the seemingly impossible . . . to penetrate up to 1" of steel for example.

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HOUSING STATISTICS

Douglas fir plywood industry gets new set of grading rules

Important changes in grading rules for Douglas fir plywood—covering nine interior and seven exterior grades—went into effect last month.

The new standard for the "bread-and-butter volume building panel" (about 4 billion ft. are produced a year, accounting for 75% of the nation's total plywood output) was worked out by the Natl. Bureau of Standards in cooperation with the Douglas Fir Plywood Assn. in Tacoma. Its intent is to simplify writing of specifications, eliminate confusion and in many instances cut construction costs. The significant changes:

1. A new low-cost underlayment grade called plybase, a name previously used on another panel. The new one is a sanded structural grade with one "repaired" surface smooth and solid enough for all kinds of resilient flooring.
2. Two new "special order" items with outstanding appearance for use with clear or natural finish—a "one-side" panel with a select face veneer of 100% hardwood and a $\frac{3}{4}$ " panel with two select panel faces and solid inner plys for cabinet work.
3. New requirements improving the appearance of "A" veneer, for use where the panels will show.
4. First-time standardization requirements for overlaid fir plywood, covering two grades—one a medium density overlay and the other high density.

In spite of word from Commerce Dept. officials last month that no general materials shortages seemed likely in '55, further scarcities of rock lath were reported in south Florida and the Midwest. Homebuilding in south Florida—where rock lath is the basic wall material in nearly every new house—was slowing down. Some Midwest builders were asking Pacific Northwest lumber companies to find them rock lath so they could use lumber. The shortage, said lumber men, was apparently one reason why transit cars of lumber were selling at distress prices at midmonth.

MORTGAGE MARKET QUOTATIONS

(Originations quoted at net cost, secondary market sales quoted with servicing by seller)
As reported to House & Home the week ending Feb. 14

| City | FHA 4½'s | | 5% equity or more VA 4½'s | | No down payment VA 4½'s | |
|---------------|-------------------|----------------|------------------------------|----------------|----------------------------|----------------|
| | Origina- tions | Second- ary | Origina- tions | Second- ary | Origina- tions | Second- ary |
| Boston local | par-101 | a | par-101 | a | par-101 | a |
| Out-of-state | a | 99-par | a | 99-par | a | 95-99 |
| Chicago | 97-99 | 99-par | 97-99 | 99-par | 96-97 | 98-99 |
| Denver | 99-par | 99-par | 99-par | 99-par | 99-par | 99-par |
| Detroit | 97½-par | 98-99 | 97½-par | 98-99 | 96½-97 | 98 |
| Houston | par | par | par | par | 97½-99 | 97½-99 |
| Jacksonville† | par | par | par | par | 97-98†† | 97-98†† |
| Kansas City | 99-par | par | 99-par | par | 96-98 | 99 |
| Los Angeles | 99-99½ | 99-99½ | 98-98½ | 98-98½ | 97-97½ | 97-97½ |
| New York | par | par | par | par | par | par |
| Philadelphia | par | par | par | par | 99-par | 99-par |
| Portland | par | par | 99-par | 99-par | 97-99 | 97-99 |
| San Francisco | par | par | par | par | 95-97½ | 95-97½ |

a No market.

* Probable prices throughout Pacific Northwest.

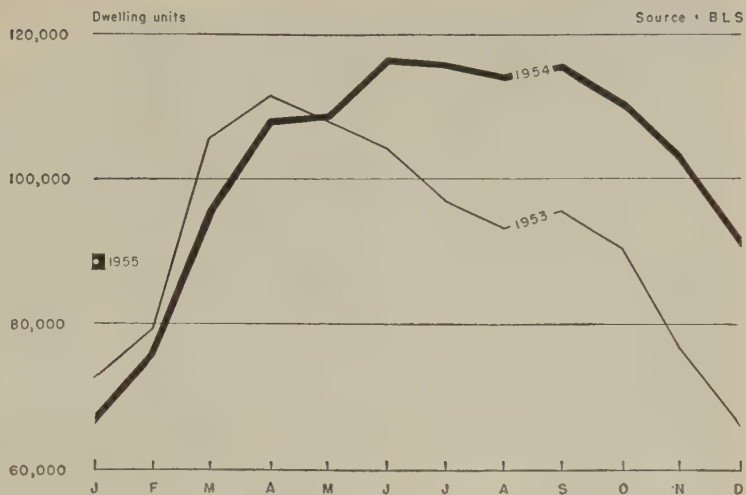
† Probable prices throughout Florida.

†† Without closing costs in cash.

SOURCES: Boston, Robert M. Morgan, vice pres., Boston Five Cents Savings Bank; Chicago, Maurice A. Pollak, vice pres. & secy., Draper & Kramer Inc.; Denver, C. A. Bacon, vice pres., Mortgage Investments Co.; Detroit, Robert H. Pease, pres., Detroit Mortgage & Realty Co.; Houston, John F. Austin Jr., pres., T. J. Bettes Co.; Jacksonville, John D. Yates, vice pres., Stockton, Whatley, Davin

& Co.; Kansas City, Byron T. Shutz, pres., Herbert V. Jones & Co.; Los Angeles, John D. Engle, pres., Insurance Funds Mortgage Co.; New York, John Halperin, pres., J. Halperin & Co.; Philadelphia, W. A. Clarke, pres., W. A. Clarke Mortgage Co.; Portland, Franklin W. White, pres., Securities, Inc.; San Francisco, William A. Marcus, senior vice pres., American Trust Co.

NONFARM HOUSING STARTS



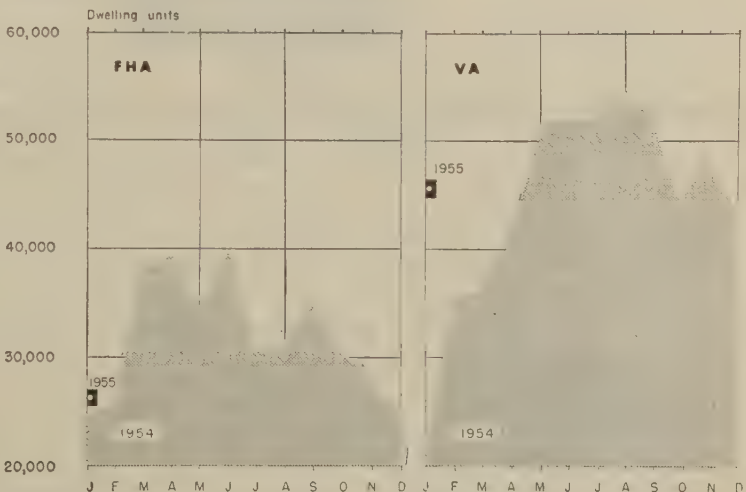
Nonfarm housing starts reached a total of 88,000 in January, fully one-third more than in January, 1954. On a seasonally adjusted basis, private starts in January were at an annual rate of 1,424,000, a shade below December's 1,473,000 but higher than any time since 1950. December and January starts, traditionally the year's low points, seemed to presage a year of phenomenal volume ahead. But no single month is an accurate gauge of a year's total.

BUILDING MATERIALS' PRICES



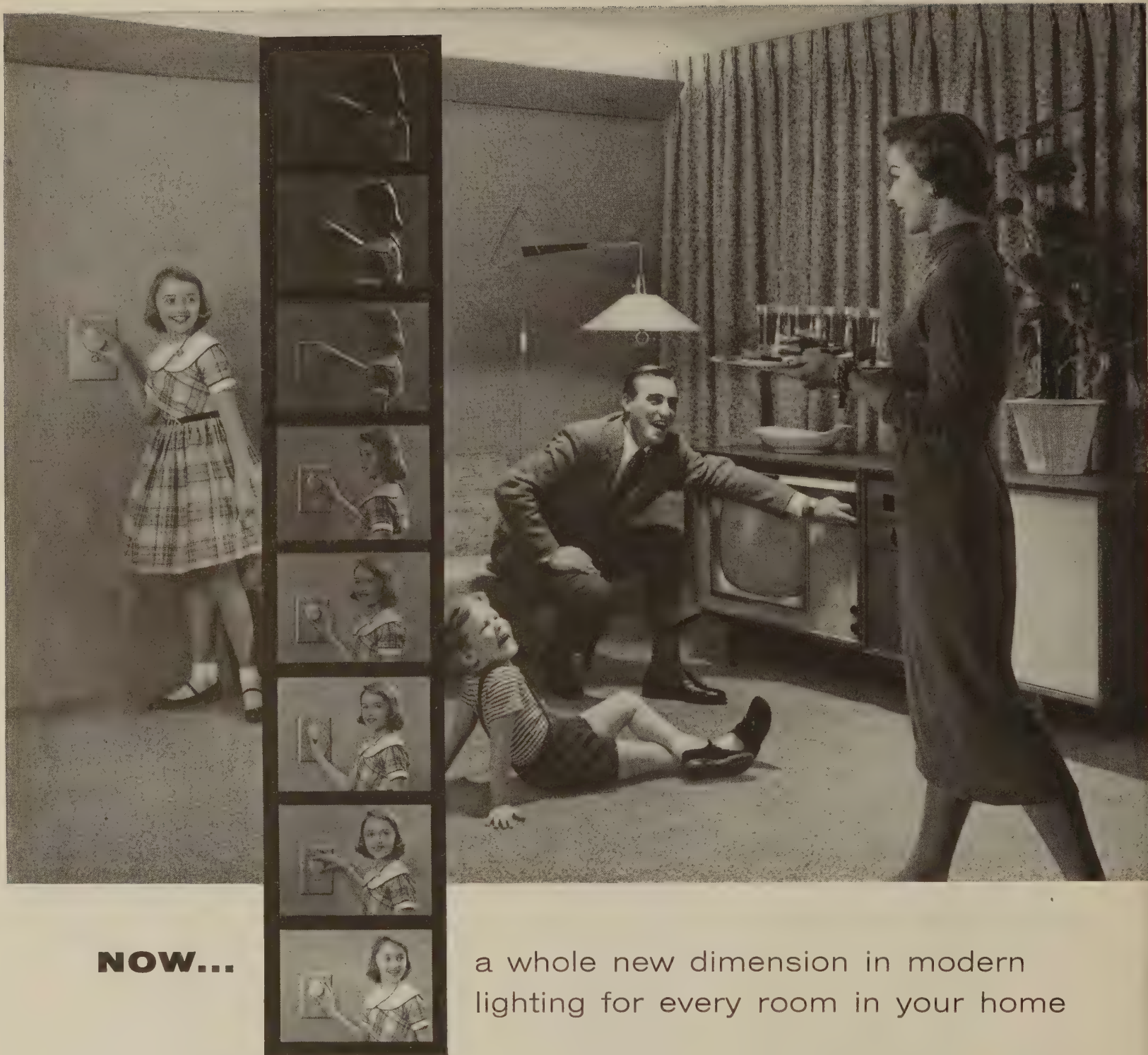
BLS' index of wholesale building materials prices inched up only one-tenth of a point from December to January 1, to 122.1. Lumber and wood products caused the tiny increase.

FHA AND VA APPLICATIONS



FHA new applications rose from 24,594 units in December to 26,067 in January. VA appraisal requests for proposed homes showed a similar increase, from 44,251 in December to 46,204 for the first month of '55. FHA starts in January (distinct from applications) continued to account for 25% of private starts.

(NEWS continued on p. 51)



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James F. Coyne

PEOPLE: C. E. Sigety, 32, lawyer with no housing background, named deputy FHA chief; Len Haeger quits NAHB

FHA filled the post of deputy commissioner—vacant for 11 months—with an extensively-educated New York lawyer who has hitherto had no experience in housing. **Charles Edward Sigety** (pronounced "ziggety") took over the second-in-command post vacated by



SIGETY

Walter Greene last April (Greene is now with **Thomas Coogan** at Housing Securities, Inc. in New York) and since then managed by **J. Stanley Baughman** in addition to his duties as president of FNMA. Sigety is an energetic 32-year-old (youngest man ever in the No. 2 FHA position). He went to work as a page for the Bankers Trust Co. in New York when he was 16. The son of Hungarian immigrant parents, he has taken degrees at three universities—Columbia, Harvard and Yale—and taught at Harvard, Yale and Pratt Institute. His law degree is from Yale.

Sigety is frank about the fact that he is not experienced in housing (except for a smattering of mortgages through his legal work), but has already had time to say that he sees "enormous opportunities" in the 1954 Housing Act. Asked for comment on the thesis that FHA had been neglectful of its responsibility to the public, he said: "FHA is primarily a service rendered to the public. The industry part of it—bankers and builders—are only the technique for accomplishing it." Sigety is married to the former **Katharine Kinne Snell**, who is food editor of NBC's televised "Home" show. They have two small children.

Leonard G. Haeger, director of NAHB's Research Institute since it was founded in 1952, resigned to become technical director (at close to twice the pay) for **Levitt & Sons, Inc.** At Levittown, Pa., Haeger will fill the gap left by the departure of Engineer **Irwin Jalonack** to go into business for himself.

St. Louis-born Haeger, now 48, began his career as an architect (master's in architecture, Washington University, 1933). In Natl. Youth Administration days, he was chief NYA architect in Missouri. In World War II, he became a commander in the Navy civil engineering corps, worked on development of the Quonset hut. After the war, he joined the Natl. Housing Administration, eventually became asst. director of HHFA's research division. Haeger joined NAHB in 1951 amid the Korea-born shortage of materials, as materials expeditor.



HAEGER

Close to 400 banquet guests turned out in Madison, Wis. last month to praise **Frank Lloyd Wright** and hand him a check for \$10,000. Wright said he was "overwhelmed" at the testimonial dinner and would continue to operate Taliesin in Wisconsin after all. He had announced his intention to vacate the premises last fall in the face of a State Supreme Court decision that he owed \$13,000 in back taxes on the property (H&H, Dec. '54, News). "Mr. Wright

is as much a part of the state as the Wisconsin River Valley," said Gov. **Walter Kohler** at the dinner. Said Wright: "I never would have known of the appreciation given me this evening but for an adverse court decision. Architecture is the mother of the arts. . . ."

Designer **Cliff May**, a pioneer in suing people who build imitations of his houses, won a precedent-setting case.

It was his fourth major brush with alleged plagiarists of his prize-winning plans in two years and the most substantial endorsement to date of the premise that architectural drawings in California are protected by copyright laws.

May and his associate, Architect **Chris Choate** of Los Angeles, had filed suit against Los Angeles Architect **William M. Bray**, the Bristol Development Co. and the Federated Construction Co. on



MAY

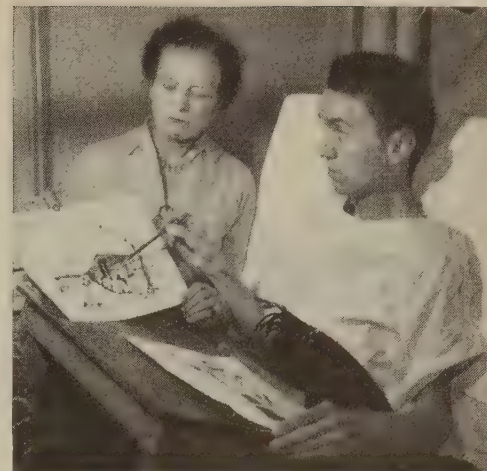
four counts, one of which alleged that Bray had "copied and put his name" on May-Choate's "intellectual productions after making only colorable and insignificant changes. . . ." The court found that there had indeed been infringement of copyright "by the copying, publishing, vending and using by defendants of said architectural drawings . . . and defendants have constructed houses in a tract located in the city of Santa Ana . . . known as 'Bristol Manor,' which houses are so similar in appearance to Cliff May Ranch Houses as to mislead the public into thinking that they are genuine 'Cliff May Ranch Homes' . . ."

The defendants were enjoined from further use of the copyrighted drawings and ordered to deliver up to the clerk of the court for cancellation and destruction "all copies of said architectural drawings, tracings, ozalid prints and blueprints prepared by defendant William M. Bray of said Bristol Manor houses."

Besides the injunction, May said, he received a cash settlement—amount undisclosed.

NAMED: **Henry A. Jandl**, associate professor of architecture at Princeton University, as an architectural consultant to US Steel Homes; Associate Prof. **Raymond A. Fisher**, as acting head of the architecture department at Carnegie Tech replacing **John Knox Shear**, who recently became editor of *Architectural Record*; **R. Manning Brown Jr.**, as vice president of New York Life Insurance Co. in anticipation of the forthcoming retirement of Vice President **Charles R. Van Anden**, head of the real estate and mortgage loan department; **Richard B. Irwin**, 29, an official of the Pittsburgh chamber of commerce, as executive secretary of the Home Builders' Assn. of Metropolitan Pittsburgh.

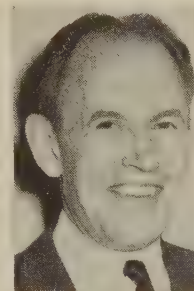
Except for the seven automatic members (officers, ex-President **R. G. Hughes** and former Exec. Vice Pres. **Frank Cortright**), only four of NAHB's executive committee this year are holdovers from the '54 slate. President **Earl W. Smith** named these seven new men to the homebuilders' top council: **Irving Jordan** of Los Angeles, **James Albert** of Miami, **August Rahives** of Oakland,



STRICKEN WITH POLIO, Architect **Landis Gores**, 35, is making an attempt to resume the work that won him so much acclaim during his active postwar career. Shown here with his mother in Children's Hospital, Boston, Gores does rough sketches with his right hand (the only part of his body not paralyzed), which will be picked up by an associate and transferred to a draughtsman's board. Harvard-trained Gores worked from 1945 to 1950 with Philip Johnson in New Canaan, Conn., where he lived in a self-designed house featured on the cover of the first issue of *HOUSE & HOME* (Jan. '52).

Calif., **Vernon Mudd** of Tulsa, **Nicholas Molnar** of Cleveland, **Dave Slipper** of Los Angeles and New York (see below), **Ernest Zerble** of Mason City, Iowa. He reappointed **Martin L. Bartling Jr.** of Knoxville, Tenn., **George Goodyear** of Charlotte, N. C., **W. Hamilton Crawford** of Baton Rouge, La. and **John Worthman** of Ft. Wayne, Ind.

The American Council to Improve Our Neighborhoods (ACTION) picked its key staffers to aid Maj. Gen. **Frederick A. Irving** (ret.) in the council's drive to boost nationwide efforts against slums and blight. **David C. Slipper**, since 1945 technical



SLIPPER

director for Kaiser Community Homes and the **Fritz B. Burns** Organization in Los Angeles, was named field service director. Slipper, well and widely known in the homebuilding field, is 1955 chairman of NAHB's Research Institute and a member of BRAB.

Martin Meyerson, associate professor of land and city planning at the University of Pennsylvania, was appointed research director. He is research editor of the *Journal of the American Institute of Planners* and co-author of *Planning, Politics and the Public Interest*, a book on public policy decisions in housing. He will be on leave from the university. **Clyde M. Vandeburgh**, former executive director of the American Heritage Foundation and the Crusade for Freedom, will be acting director of information and education.

(continued on p. 52)

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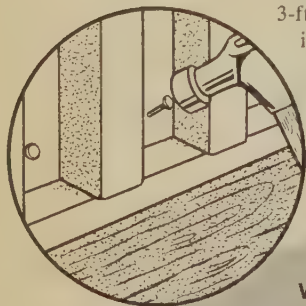
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trying to think up new ways for New York to more public and private housing built.

Louis J. Fellenz Jr., 39, FHA director in Milwaukee for the past year, was named regional housing director to fill the vacancy caused by the departure of **Clyde L. Powell** (H&H, Mar. '54 et seq.), who is out on bail after getting a year's sentence for contempt during the investigation last fall. Fellenz is a lawyer and served in the Wisconsin Senate from 1941 to 1949.

Kline D. Reed, 52, former judge of the circuit court of Fulton County, Ind., was appointed director of Region IV of FHA.

Thomas J. Sweeney, who had been acting assistant deputy administrator in charge of VA's loan guarantee division since **T. B. King** moved to National Homes (H&H, Jan. '55, News) was officially appointed to the job. His appointment to the \$11,800 position put an end to Democratic fears that a Republican appointee would be brought in to serve. Sweeney, 50, has had considerable experience in the mortgage field, including the last 10 years with VA. He was educated at St. Ignatius College in Cleveland and later at Georgetown University.



SWEENEY

John Lloyd Wright of Del Mar, Calif. must continue his legal fight with the state's board of architectural examiners (H&H, Aug. '54). Last month the appellate department of San Diego County superior court ruled that the architectural practice act was constitutional and sent two cases back to municipal court for trial on factual issues. The 62-year-old Wright, son of **Frank Lloyd Wright**, had run afoul of both the board of civil and professional engineers and the architectural examiners over a concrete clothing store he designed in Oceanside in 1953. The appellate court held that a charge against him of illegally drawing engineering plans did not state a public offense. He was clear on that side of things, but still faced a decision on two architectural points: that he displayed a sign indicating he was a licensed architect (he is registered elsewhere, but not in California) and that he failed to notify a client (the store owner) in writing that he was unlicensed in the state.

ELECTED: **S. Carl Smithwick**, president of Smithwick Concrete Products Co. of Oregon, and president of the Natl. Concrete Masonry Assn.; **Warren L. Morris**, president of Ostendorf-Morris Co., Cleveland real estate firm, as president of the Urban Land Institute; Architect **Pietro Belluschi**, dean of the school of architecture at Massachusetts Institute of Technology, to lifetime membership in the Natl. Institute of Arts and Letters; **William Gillett**, vice president of Detroit Steel Products Co., as president of the Producers' Council.

DIED: **Joseph S. Shaw**, 68, real estate appraiser and vice president and treasurer of the First Federal Savings & Loan Assn. of Atlanta, Jan. 2 in Atlanta; **Albert Ayrton Farnham**, 62, former professor of landscape architecture at VPI, Feb. 1 in Roanoke, Va.; **Charles D. Maginnis**, 88, architect and past president, American Institute of Architects, Feb. 15, in Boston.

Urban renewal's best blueprint

Washington, D. C. could wipe out its slums in ten years by following a 21-point plan, says a \$12,000 report by

Experts James Rouse and Nathaniel Keith

If a mapped-out program is the first requisite of successful urban renewal—and it undoubtedly is—the job has been done in Washington, D. C.

Only thing left is to get started on the urban renewal.

The latest how-to-do it book on the new Housing Act's legislative answer to blighted areas is a 50-page analysis of what's wrong with the city. It is by two slum-clearance experts: Mortgage Banker James W. Rouse of Baltimore, long active in outspoken efforts to better man's urban lot, and Nathaniel Keith of Washington, former slum clearance director for HHFA who is now in private consulting practice.

Decade to do it. The \$12,000 Rouse-Keith report—which has already been highly commended by experts in and out of Washington—is called "No Slums In Ten Years." The first sentence in the book states unequivocally that slums can indeed be eliminated from Washington in ten years. Success depends upon two things—both easy to prescribe but hard to accomplish:

1. Developing, in and out of the District government, a zeal, a vigorous spirit, a determination to do the job. (In a talk shortly after the report appeared, Rouse lamented: "There seems to be a lack of enthusiasm for getting rid of slums in Washington.")

2. Organizing the complex, loosely knit, multi-agency operation of urban renewal into a well integrated team with duplications minimized, responsibility sharply defined, and leadership clearly pinpointed.

Rouse and Keith stressed "effective organization." Without it, they say, "Washington will neither eliminate its slums nor significantly check their growth. . . ."

No sniping. The report is based on the primary fact of urban renewal phrased in the President's housing advisory committee report: "A piecemeal attack on slums simply will not work. . . ." The Rouse-Keith version: "The new phrase 'urban renewal' has evolved out of an awareness that unintegrated piecemeal attacks on the slum problem will not work." (Rouse is an authority on this concept; he headed the President's committee section on redevelopment, rehabilitation and conservation.) The report therefore reads: "The real task of urban renewal is to create clean, livable, cared-for neighborhoods out of the vast sprawling stretches of filth, congestion, and disorder that mark most of the inner city. This task demands the thoughtful employment of the full resources of the community."

The first steps to be taken: completion of a proposed administrative organization required to carry out the program and adoption of a strong housing code.

The big list. Rouse and Keith put forward 21 specific recommendations on how Washington must set up the machinery to succeed at urban renewal. The most important:

► Create the permanent posts of assistant engineer commissioner for urban renewal and of director of the office of urban renewal.

► Establish an Urban Renewal Council to advise the assistant engineer commissioner.

► Create three new branches of the housing division of the department of licenses and inspections: 1) a neighborhood enforcement unit to check violations, 2) a "preventive enforcement" unit to detect early signs of blight, 3) a complaints branch. This would require at least double the number of housing inspectors on duty (now 62) and cost the District some \$300,000 a year. The present organization (with housing, electrical and plumb-

ing inspectors operating on their own) is so "complex, cumbersome and confusing" with its "multiple inspections, notices and follow-ups" that it would "threaten the workability of the entire renewal program," the report asserted. Complained Rouse and Keith: "It invites inconsistent standards of administrative performance by the enforcement officials. It will confuse and harass the property owners. It will be extravagantly expensive. It will bring discredit to the program at its outset."

► Form a housing court so all infractions of the housing, building, health, zoning and other laws dealing with human habitation will come before a single judge.

► Develop a strong neighborhood organization that will become a "force for continued vigilance" in the renewed neighborhood. Without such a group, upgraded areas can easily sink again into slum squalor (as the case of Baltimore shows).

► Develop a comprehensive housing code—now under study by the commissioners—at least as stiff as those adopted in other large cities in recent years.

► Set up a private renewal corporation with "substantial" (\$1 to \$2 million) capital to be a "pace-setting, trail blazing profit venture with broad business support and a community gleam in its eye."

► Create a Fight-Blight Fund (the nation's (continued on p. 58)

The report's authors: two top slum experts

The kinetic energy of **James W. Rouse**, president of the Baltimore mortgage banking firm of the same name, has led him into so many pursuits that one of his good friends joshed recently: "I expect to see him go up in a burst of blue flame some day."

The remark, it should be understood, reflects chiefly awe and admiration for Rouse's



ROUSE

ability to get a staggering amount of things done, not concern that he is overdoing it. Not only has Jim Rouse, at 40, built his mortgage business into the largest in Maryland (\$90 million), but he also crams in a schedule of civic and trade group jobs that range from speaking for the World Federalist movement to being executive committee chairman of the new Greater Baltimore Committee, a kind of super chamber of commerce. Rouse is currently chairman of the Mortgage Bankers' Assn.'s minority housing committee and a board member of MBA, the Fight-Blight Fund (which he helped found), and of the new American Council to Improve Our Neighborhoods. Rouse was closely identified with pioneering success of Baltimore's slum rehabilitation efforts until his dissatisfaction with the slow pace of help from city hall led him to resign as head of the advisory council to the city housing bureau. (H&H, April '53, News).

Although he holds a law degree (Univ. of Maryland '37) and was admitted to the bar the same year, Rouse's entire business career has been in mortgage brokerage.

He is so much in demand as a speaker, he characteristically talks from a handful of notes jotted down on his way to the rostrum. Few would suspect it to hear the well marshaled flow of thoughts, as often as not clothed in phrases a litterateur could envy.

Nathaniel S. Keith is a wiry, medium-sized man in his late forties who presents the fairly rare phenomenon of a newspaperman turned hous-



KEITH

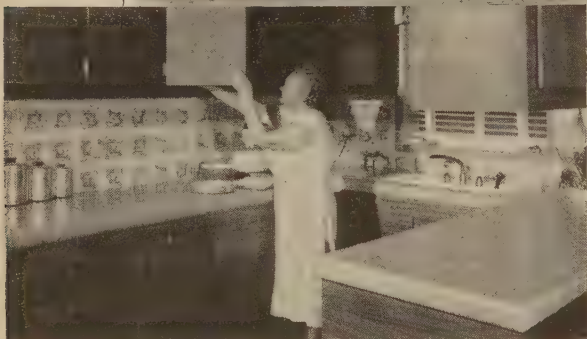
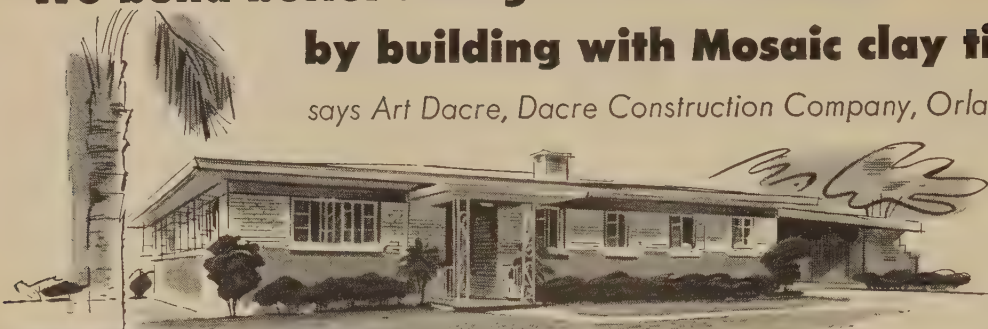
ing expert. Born in Cincinnati, he was graduated from Brown University in 1929 and went to work for the Wall Street Journal. He covered transportation for them in New York for seven years and then went to Washington for two. In 1940 he got his first government job—as assistant to the late Robert Smith, public relations director for FHA. Later he was assigned the ticklish job of liaison man between the old National Housing Agency and Congress, held it until 1949 when he moved to head up HHFA's division of slum clearance and urban redevelopment. He left in June 1953 as the new Republican administration started replacing Democratic incumbents in top HHFA jobs.

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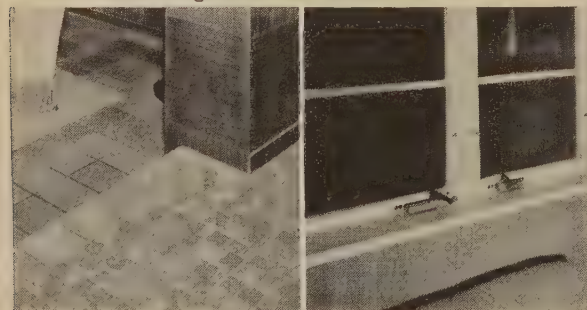
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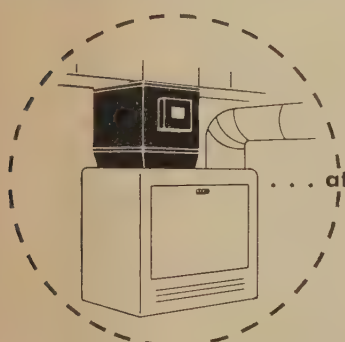
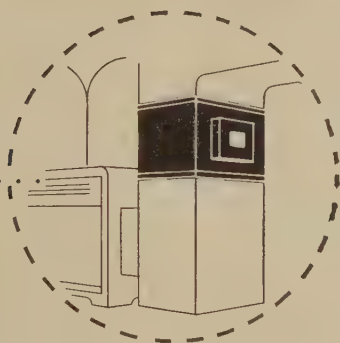
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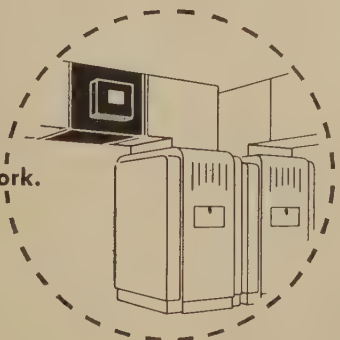
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only one so far is in Baltimore) to give fixup credit to impoverished slum owner-occupants who cannot get it from regular lenders.

What about displacees? Rouse and Keith figure that family displacement caused by their plan would involve about 20,000 families. Over a ten-year period, therefore, the annual relocation load would be 2,000 families, or 165 a month. They point out that there are over 60,000 family moves a year in Washington. Thus urban renewal would add only about 3% to this activity.

Rouse and Keith estimated cost of the whole program at \$200 million. Federal grants of \$166 million would be required; the city's one-third share of \$67 million could be met, they say, by coordinating the district's ten-year public works program (to cost \$300 million) with urban renewal. Thus, by placing street, sewer, recreational building in renewal areas, the city would qualify for Federal aid merely by a juggling of construction it should do anyway.

Besides, the report puts the resultant gain from increased assessments, after renewal, at some \$7 million a year, implying that the city's share of the cost could be amortized in about ten years.

Would the report help other cities get started on an urban renewal program? It was indeed a landmark of logic. HHFA Administrator Cole called it "probably the most comprehensive piece of work ever done." He said it "certainly is what Congress intended when it wrote the 'workable plan' into the Housing Act." The Natl. Assn. of Housing and Redevelopment Officials thought the report so good it called for caution. Said NAHRO's newsletter: "Not many cities are now able to present such a comprehensive program, and it would be unfortunate if this report became the standard against which other workable programs were judged. It ought also to be noted that this is not yet the District of Columbia's program. It is still but a recommendation—a report to the city commissioners. The city must still take action to put it into effect."

Gratiot redevelopment moves again in Detroit

Detroit had been trying to get a feasible plan for redeveloping its slum-cleared Gratiot-Orleans area for half a decade. Homebuilders had originally talked about tackling the property, but the idea got stymied in red tape. Big Builders Warner-Kantner had applied next and left a several-thousand-dollar deposit with the city; they changed their minds, taking the deposit with them. It was not until the Citizens Redevelopment Committee, composed of some of Detroit's leading industrialists, store owners, AFL union chiefs and financial men, came up with an over-all plan a few weeks ago that the project took a turn for the better.

Designs offered by Architects Minoru Yamasaki, Oskar Stonorov and Victor Gruen seemed not only feasible but good looking. The architects proposed to "reverse trends which threaten the very life of our great urban centers" (the land is only 3,000' from the city's business section) by dividing the property into three sections to house 4,400 families. Units would be mixed in to the park-like area in modern, single-family de-

(continued on p. 66)



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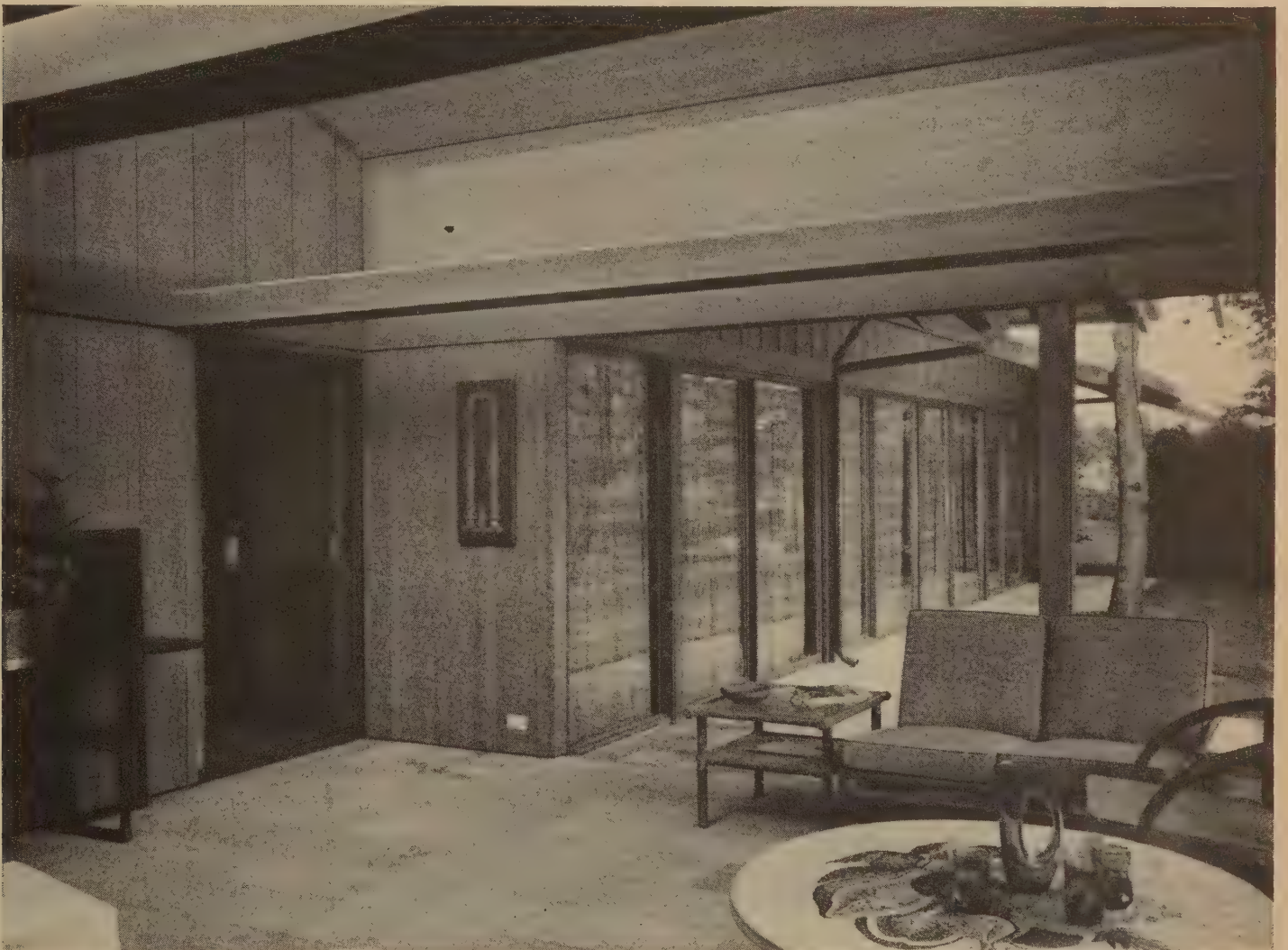


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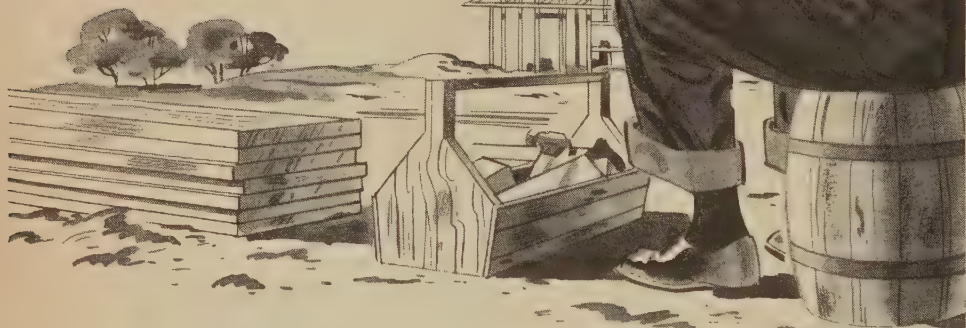
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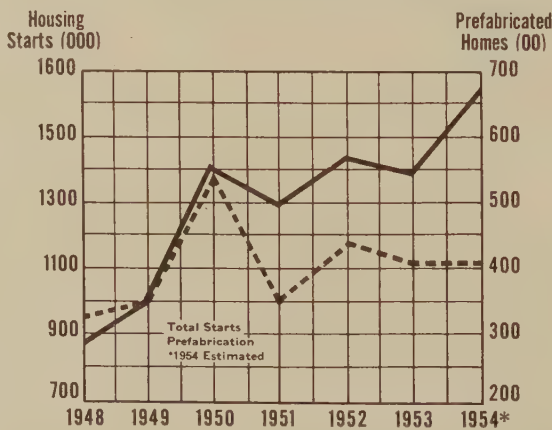
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It's one of the reasons more and more builders have switched to prefabricated home building . . . why in 1954, prefabrication showed a gain of more than 30% over 1953. All structural materials are delivered in one shipment . . . from one reliable source.

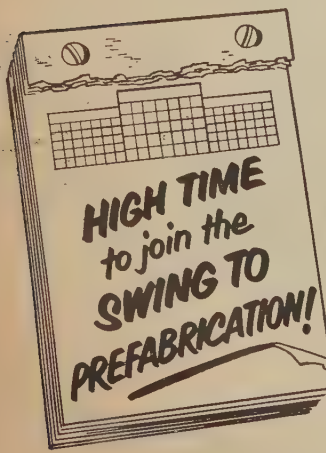
Investigate prefabrication as the answer to mass produced homes that meet every requirement of individual tastes . . . in style, size, and in modern living comforts. They go up faster and sell faster because they're today's biggest home value.



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tached and semidetached houses, both row and court-type garden apartments and high-rise buildings. Its public housing (about 1,100 units) would be dispersed.

No redevelopment project was ever built in a day, however, and the Detroit plan was still beset with technicalities. One of the Citizens Committee's pet schemes had been a proposal to set up a nonprofit corporation to buy from the city all residential property involved and resell it at cost to parties interested in building on it. The committee could thus keep check on the aesthetics of the project. HHFA said it was sorry, but this would be illegal. An alternative was proposed: the 12-man committee could be given official power to act as the city's agent in controlling the design of the plan. How this would work out was still being discussed.

Air conditioning leaders foresee 10% rise in output

The air-conditioning industry has hitched up its belt and again is talking loudly of new ways to grab bigger markets.

Delegates crowding the annual meeting of the American Society of Heating and Air-Conditioning Engineers (name changed to substitute "Air-Conditioning" for "Ventilating") were mindful of last year's glut in room conditioners. But they were not letting the painful experience crimp their plans for '55.

"Competition is tough," said a vice president from Carrier Corp., "but the production is booming."

Carrier President Cloud Wampler, who often makes predictions on an industry-wide basis, put total sales in 1954 at close to \$2 billion. For 1955 he predicted a rise to \$2.2 billion. Other experts were estimating an over-all rise of between 10 and 15%.

The lion's share? The question was which section of the increasingly-diversified industry would account for most of the rise. Last year, manufacturers of room models were caught in a blast of over-optimism and cold air. Sales did not reach a million units, let alone the 1.2 million expected. Drop in such sales helped account for an \$8.1 million loss for Servel, Inc. in fiscal '54. York Corp. suffered a net loss in its first fiscal quarter (ending Dec. 31), with sales 25% below what they were a year ago. Carrier Corp. showed a modest increase in profits, but reported a decline in sales.

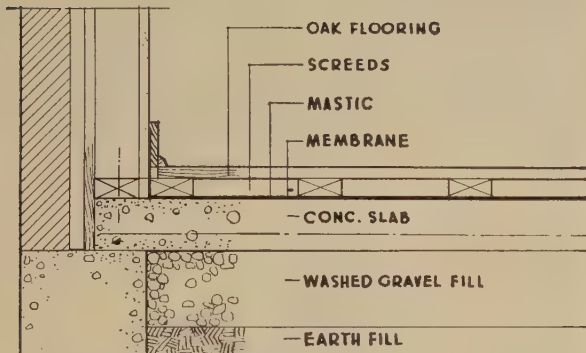
For the new year, predictions were that production of room units would not pass last year's mark but that sales would. Philco Vice President R. A. Rich foresaw sales at 1.5 million.

Wet heat & air models. More important on a dollar basis were plans for whole-house conditioning. The industry was at work on air-cooled models for central systems. Richard Locke of Minneapolis-Honeywell estimated that the number of air-conditioned houses built in '55 would be double last year's 75,000. Wampler saw a market of \$28 billion in air conditioning of existing homes, divided between those with wet and those with dry heat.

Wet-heat models at the ASHAE meeting were hot news. Some 25 new kinds of boiler-chiller packages were on exhibit. But with such systems estimated at third-higher costs over the old-line ductwork systems, planners for the industry still saw research ahead.

(continued on p. 70)

New low-cost method for installing Hardwood Strip Floors over concrete



1. NO WOOD SUBFLOOR is needed with the "screeds-in-mastic" method of installing strip Oak Flooring over concrete slabs. It's fast, easy, economical... and proven successful in thousands of homes. Any approved type of slab construction with membrane moisture barrier may be used.



3. RANDOM LENGTH SCREEDS are laid in a staggered pattern throughout the floor area with ends overlapped at least 4". An inch gap between screed ends and the base plate provides necessary expansion space. Flooring may be laid as soon as screeds are in position without waiting for mastic to harden.



2. ECONOMY OF THIS installation method makes Oak Floors practical for even lowest-cost homes. No special skill or tools are required. A sound nailing surface is provided by short lengths of preservative-treated 2x4 screeds laid in an asphalt mastic which anchors them to the concrete slab.



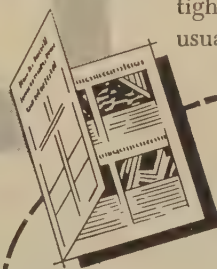
4. SIDE AND END-MATCHED FLOORING is used, blind nailed. Each strip bears on at least two screeds but joints don't have to meet over screeds. Nailing to both screeds at lap joints binds the floor together in a tight, solid unit. Sanding and finishing follow in the usual manner, unless prefinished flooring is used.

No other floor gives you ALL the advantages of OAK for slab-on-ground houses

- Prevents costly heat loss through the concrete slab
- Counteracts the uncomfortable hardness of concrete
- Preferred by 8 out of 10 home buyers, builders, and architects



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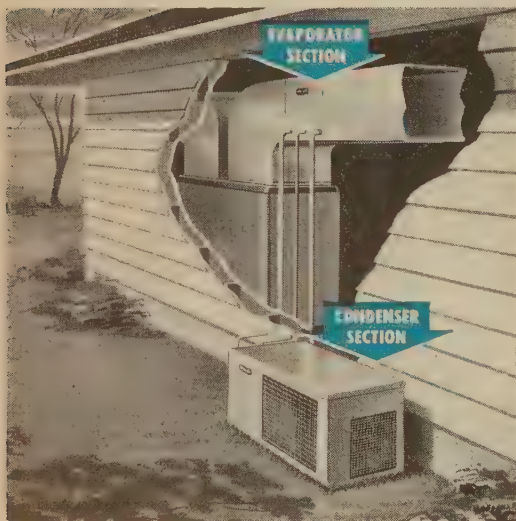
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New Remote MARVAIR is the answer. The condenser section (with compressor in weatherproof, soundproofed case) can go outside, in garage, or attic or basement. Silent sirocco fans holding noise to a whisper.

So rugged it cools and dehumidifies when the thermometer shoots up to 126°, the Remote MARVAIR is precision-built of finest materials, yet the lowest priced unit of its kind on the market. A natural for project builders; ideal for remodeling or modernizing. Push MARVAIR Remote and profit!

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- **Fits Any Forced Air Furnace.** Evaporator section may be installed with furnace, added to present furnace (in modernization jobs) or with separate ducts.
- **No Water Required.** Air-cooled, waterless. No water tower—no water expense or restrictions in drought areas.
- **Maximum Performance.** Extra large condenser and evaporator.
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"ATTIC-TYPE" MARVAIR

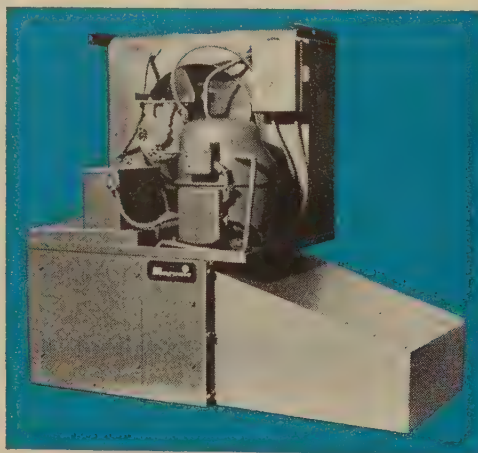
Packaged Waterless Units for homes up to 1200 sq. ft.

Suitable for any small one-story house with central hall. Unit installed in attic or false chimney, with hall ceiling dropped to act as dispersal chamber. Sensationally low first cost and installation cost. Unusually quiet and economical in use. This revolutionary MARVAIR is a *natural* for builders of small homes.

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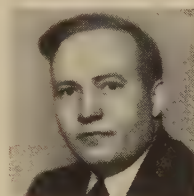
OPINIONS

These intellects shed the following light on matters of moment to housing:

Robert Moses, New York City construction coordinator, in the New York Times:



"No doubt there have been contemptible chislers, but FHA produced houses in quantity when we faced a revolution led by returning veterans without a place to lay their heads. There was an almost hysterical demand for shelter without excuses, delay or red tape, no matter how it was brought about. None of the Washington investigators speaks of the atmosphere of that day and of the extraordinary record of this city in meeting the challenge."



Prof. Allison Dunham of the University of Chicago law school, in *The Mortgage Banker*:

"If the mortgage industry uniformly were as zealous about checking against housing code violations before placing a mortgage or during the term of the mortgage as it is about checking nonpayment of the real property tax on mortgaged property in all cities, there would be very little more housing code delinquency than there is tax delinquency. The mortgage industry has the same power against the mortgagor for a code violation as it has for tax violations, and it has the same opportunity—and duty—to refuse a loan on property in violation of housing laws as it has on tax delinquent property."



Architect Ralph Walker, FAIA, past president of AIA, in talk to Natl. Lumber Mfrs.' Assn.

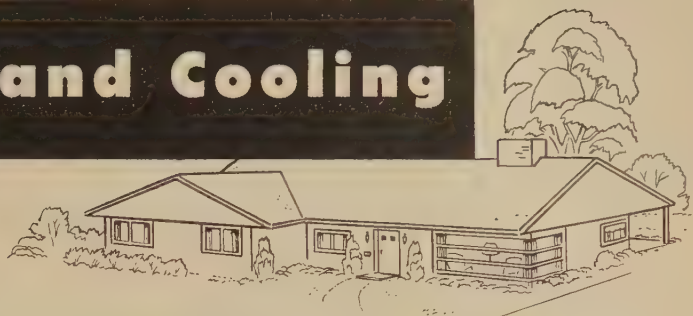
"Now the industry should no longer treat lumber as a servant to building but rather as a master that gives an elegant sense to life. The inherent beauty of wood is apparent from seeing it, feeling it and sometimes smelling it. . . . Only wood can be so beautiful in its natural quality that you want to touch it."



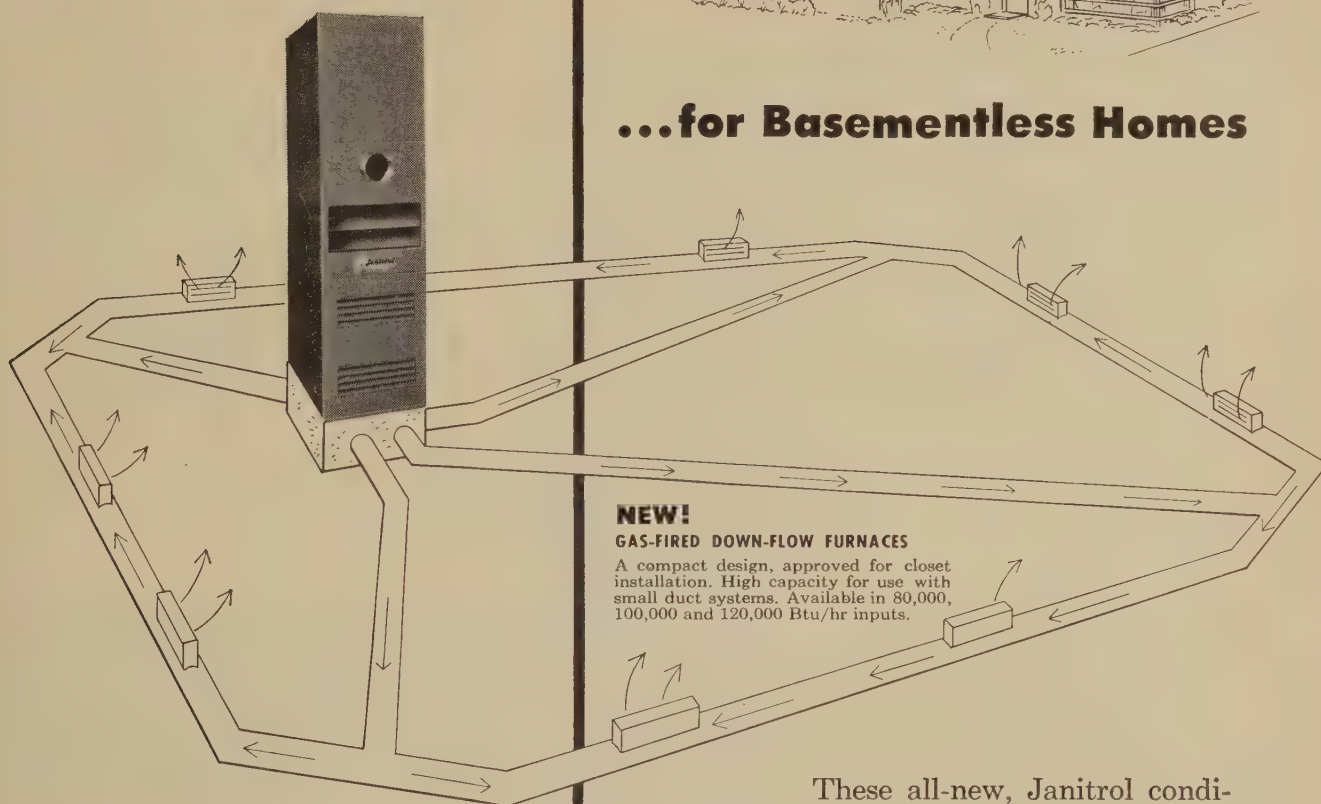
Albert W. Lockyer, MAI, past president, New York State Society of Real Estate Appraisers:

"We are told that both VA and FHA are surveying the present need for housing in many areas and are ready to restrain credit when the first signs of oversupply appear. I hope this is true because the homebuilder will not stop as long as he can get financing. And the pressure for credit expansion, as things slow down, will be greater than ever."

Better Heating and Cooling



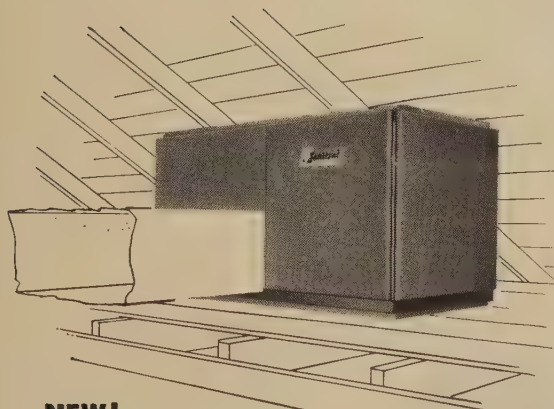
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GAS-FIRED DOWN-FLOW FURNACES

A compact design, approved for closet installation. High capacity for use with small duct systems. Available in 80,000, 100,000 and 120,000 Btu/hr inputs.



NEW!

HORIZONTAL COOLING UNIT

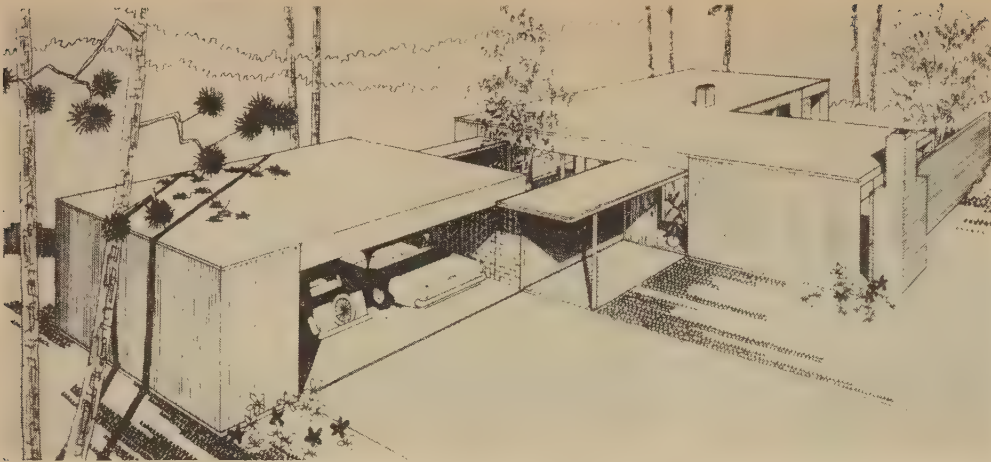
Add central cooling without sacrificing space! Installs in attic or crawl-space or suspends. Available in 2 and 3-ton capacities.

These all-new, Janitrol conditioners have been designed specifically for the perimeter-type systems used in today's popular basementless construction. They have the extra quietness and compactness required for closet, crawl-space or attic installations. And both units are built and backed by Janitrol... makers of quality equipment with a proved record of durability, performance and economy!



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TWO-BATH MODEL FOR PORTLAND HOME SHOW COMBINES PRIVACY WITH INDOOR-OUTDOOR STYLE

BUILDERS AT WORK:

Adaptable home show model

A house which fits either a flat or gable roof (cut, above) has been picked as the model home for the 1955 home show in Portland, Ore.

Architects and builders teamed up in a contest to choose a "practical, contemporary" design for a three-bedroom model in the \$12,000-\$16,000 price range. Winner among 25 entrants: **William L. Fletcher**, a junior associate of the Oregon AIA chapter. Best features of the design, as Fletcher sees it, include open layout of living, dining and kitchen areas which promotes good traffic flow, two private patios for indoor-outdoor living. Says Fletcher: "The house will fit on either a wide or a narrow lot with no basic changes." Interior finish is painted, with some natural finish wood, notably 1x4" hemlock paneling. Ceiling is on a 7' module with 3" laminated roof or 2" T&G decking, which fits FHA requirements.

Contest judges were Architects **Paul Hayden Kirk** of Seattle, **Robert B. Price** of Tacoma and **Robert Wilmsen** of Eugene, Builders **John J. LaPorte** of Portland, **Delbert A. Belfoy** of Tacoma and **Mark Perrault** of Portland. LaPorte was to build it for the March 4-14 show, being held in conjunction with a Pacific Northwest builder conference.

White cliffs of Doelger

Builder **Henry Doelger's** rows upon rows of stucco row homes (17,400 in 29 years) that fill the western slopes of San Francisco have led wags to dub the area the "White Cliffs of Doelger." As peninsula-tip San Francisco began to run out of buildable lots in the postwar housing boom, Big Builder Doelger moved to neighboring Daly City, started

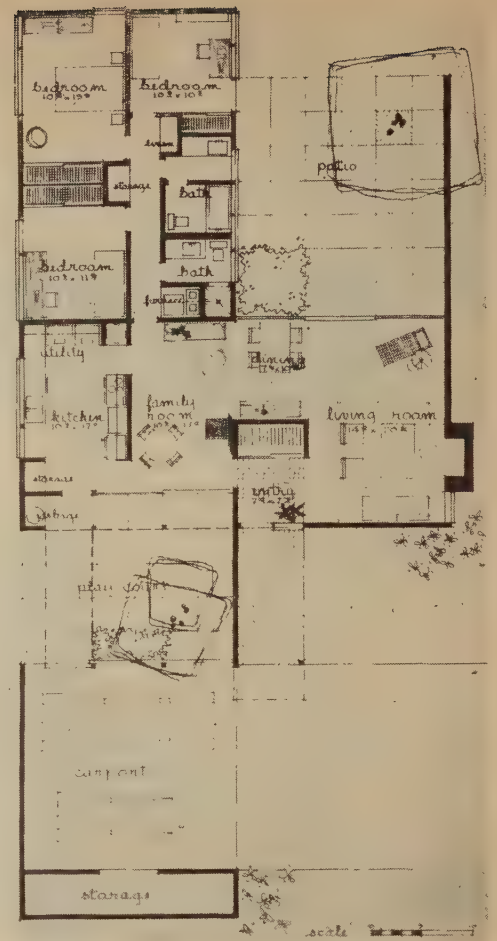
afresh. Since 1949, his Westlake development has mushroomed from sand dunes and artichoke fields into a town-within-a-town of 3,400 single-family houses, 1,000 apartments, three schools and a big shopping center.

Most of Doelger's San Francisco homes went up on 25' lots, dictating an arrangement of living room above garage. At Westlake, Doelger clung to the tiny lot pattern. He offers his customers a choice of 25 floor plans and nearly as many styles of design (cut below), resulting in a hodgepodge that includes just about everything but rambling ranch homes. Price range: \$12,275 to \$29,850. Although Doelger hit a 1,000-a-year clip in production last year, Westlake is still only a third of the way to its projected 9,500-house total. The Daly City council has just approved annexation of 440 acres on either side of the new Skyline Freeway, providing space for 3,000 of the total.

Blowup in Carol City?

Backers of highly-touted **Carol City**, 15 mi. from Miami (H&H, Sept. '54, News) collided with the facts of mortgage life and apparently were coming out second best. The big deal—10,000 houses to be sold at cost with the operators making their profit on community facilities—had been organized by **Ralph Stolkin** of Chicago (finance) and **Carl Byoir** of New York (publicity), with Miami Builder **Julius Gaines** doing the job. Last month the job was stalemated.

The trouble was in financing. After taking deposits on 1,400 houses, the project managers found they had firm financing for only the first 400. The trouble, said a couple of sales agents for the job,



LAYOUT IS ADAPTABLE TO MOVING CROWDS

involved a \$7,600 model (with \$250 closing costs) and a \$7,025 model (with \$225 closing costs). They reported that a verbal commitment from Bankers Life & Casualty Co. of Chicago (all financing in the new city was to be conventional) to handle these particular models had led them to believe that down payments on both models would be \$150. It now looked as though the down payments would be \$367 and \$409. Naturally something had to be done to advise customers of this change. So far, said the agents, they had been able to work things out with "about 60 or 65 buyers", but the question of how many of the controversial models had been sold in the first 400 was vague.

Upshot? In the minds of at least some of the principals the only way to sell the houses was to get FHA and VA financing. Approval from the agencies would not be forthcoming until the master plan for the whole city—tentatively approved by the county commission—had been formally adopted.

Levitt buys Jersey site

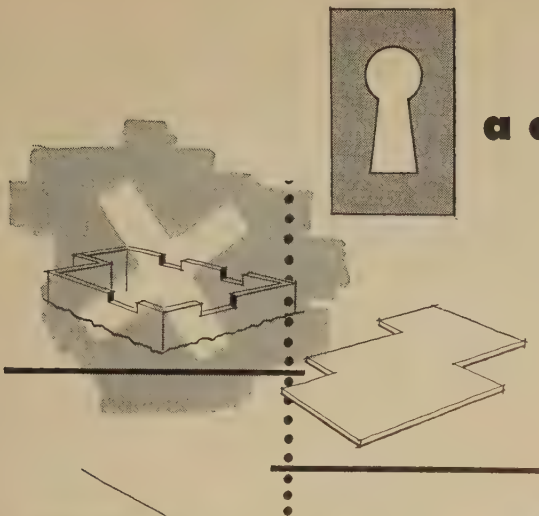
Big Builder **William J. Levitt**—high man on starts in the nation—admitted the rumors were true: he had purchased some 3,500 acres of land in the township of Willingboro, N. J.

The acreage—mostly gently rolling farmland—lies almost directly across the Delaware River from Levittown Pa., bounded on two sides by US Route 130 and picturesque Rancocas Creek (see map p. 78). Levitt declined to expand on a short statement: "Our plans for developing the tract have not yet been formulated and it will be at least three years before any houses are built there."

Whatever happens, Willingboro seemed in for considerable change. Life within the township's



SHED-ROOFED HOMES MINGLE WITH FRENCH COLONIAL IN CALIFORNIA TRACT



a confidential look at a smart builder's note book

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— More living space for less money
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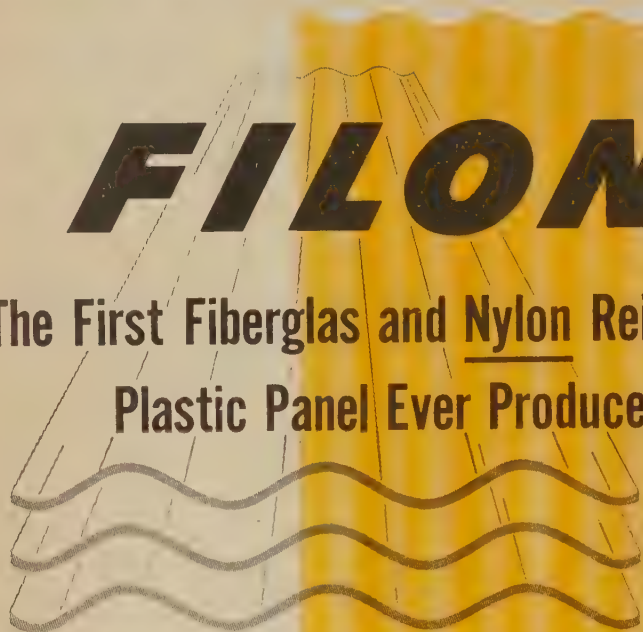
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NEW LEVITTOWN (BLACK) TAPS BIG AREA

grouse that they had not received more. Some fairly high-price deals were rumored—one of transfer of 168 acres at \$2,800 an acre. Total purchase price would seem to be between \$5 and \$6 million—difficult to prove since none of the 60-odd sales had been recorded.

By last summer it was apparent that something big was shaping up for Willingboro. Levitt's name was mentioned as a possible purchaser, but so were a number of others, including some big industrial firms. Finally Levitt's agents Judge **Alexander Denbo** and **Robert G. Bloomer** had most of what they (he) wanted except for a pivotal 600 acres near the center of the proposed area. These four properties were purchased—presumably at something over the average price—late in the summer.

In some cases Levitt's agents paid 1% of the purchase price when the agreement was signed, another 1% three months later and 8% at the end of six months. The balance would be paid on settlement day or within one year of the date of the sale agreement. Some of the farmers, however, balked at these terms and got 10% and even higher when they first signed. The sales pitch was intense. One resident reported he was visited six times before he finally gave in. "They had me surrounded," he said.

The sellers have been guaranteed possession through 1955 and some may be permitted to stay on through most of 1956.

Although Levitt says he has all the land he wants, there are reports that he is looking for more. Among the properties he is still supposed to have his eye on is the county's only pig farm, across the road from some of the property he has acquired.

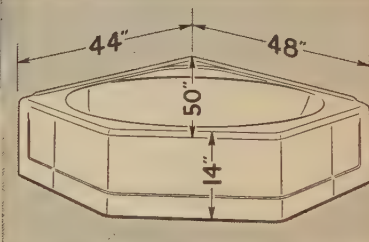
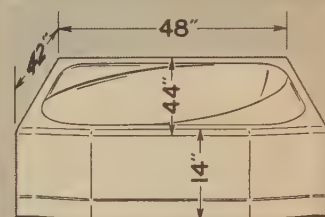
Levitt has sold nearly 11,000 houses in Levittown, Pa. and expects to sell another 6,000 there in the next year or two. Such success presumably convinced him that the Philadelphia area was still promising enough to warrant expansion across the Delaware.

For other news of Levitt operations, see p. 51.
(continued on p. 82)

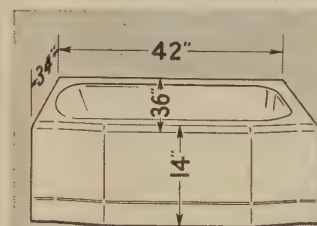


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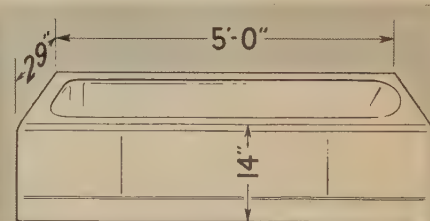
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Integral seats for foot-
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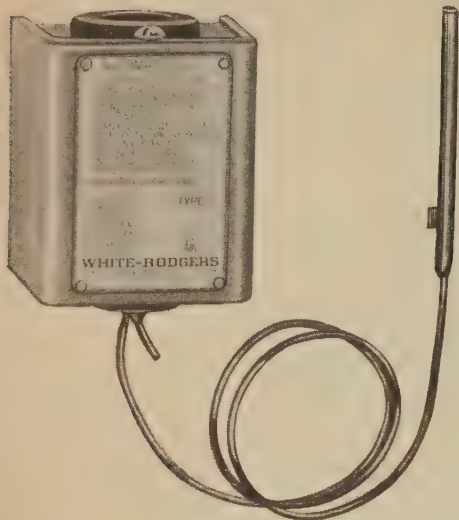
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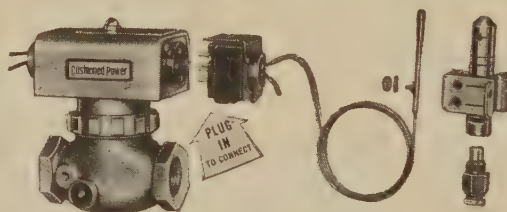
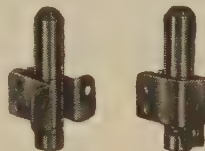
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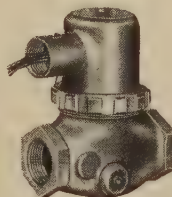
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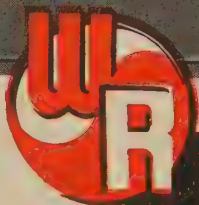
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Land deal in Louisville

Edward Rose & Sons, who reached out from their native Detroit last year and built and sold 254 houses in Dayton, stepped down to Louisville last month and purchased 125 finished lots from Prefabber **Hamilton Crawford**.

Crawford was an outlander in Louisville himself. He had gone in from Baton Rouge over a year ago, started work on a beautifully laid out subdivision of 1,200 lots (H&H, Jan. '54). But initial sales were slow; only about 75 houses were moved the first month. Prices (\$12,764 to \$32,510) involved high down payments—\$1,295 VA and \$2,900 FHA. Crawford had picked a tough row to hoe.

Builder **Irving Rose**, who handled negotiations, paid \$360,000 for the finished lots. He had not formulated his plans, but it was evident that if he built he would have to shift from his usual basement models to slab foundation because of shallow sewers in the Louisville development.

Meantime, Rose & Sons opened a new development in Detroit, offering a three-bedroom, one-story house at \$15,100 on a 30-year FHA and VA

Manning Bros.



FROM A ONE-PAGE AD: 5,000 PEOPLE

loans (see cut). A one-page newspaper ad brought 5,000 people to see the house the first nine hours it was open, tied up traffic for a square mile. Next day sales started, with six contracts signed. It was a greater response than Rose had ever had, even during a home show week.

NAHB winners

Nine builder-architect teams (some of whom are mentioned elsewhere in this section) won awards of merit from NAHB at its Chicago convention. Winners and comment from the jury:

► **G.M.B. Corp.**, Encino, Calif. and Architect **Fickett**. Price: \$32,500. "The lack of gimmicks provides a satisfying, free and easy appearance . . . considered the best of the 1954 submissions."

► **Stern & Price Construction Co.**, Cupertino, Calif. and Architect **L. W. Gerhardt**. Price: \$11,950. "The pattern of room relationship insures privacy . . ."

► **Carey Construction Co.**, Denver, and Architects **Baume & Polivnick**. Price: \$12,500-13,750. "Interior design is pleasing and well organized."

► **Volk-McLain Co.**, Los Angeles, and Architect **Edward Fickett**. Price: \$7,500. "A spacious home built at exceptionally low cost. . ."

► **Pardee-Phillips Construction Co.**, West Los Angeles, and Architects **A. Quincy Jones** and **Frederick E. Emmons**. Price: \$11,000. "A good house for the money. . ."

► **Daley & Prows, Inc.**, Salt Lake City, and Designer **Richard Prows**. Price: \$23,000. "An admirable three-zone plan in which the living room forms one unit, the bedrooms another, and the work-play area the third. . ."

► **Howard C. Grubb**, Tulsa, and Architect **Donald H. Honn**. Price: \$10,250. "The use of brick as an

Which is PINE?

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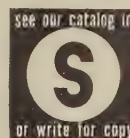
VERSATILE REZ PRODUCTS

Rez SEALER AND PRIMER—(clear Rez). A primer coat for both interior and exterior use. Prevents “grain raise,” presents a uniformly smooth surface for fast and easy application of stain, paint, or enamel.

Rez COLOR TONES—for both interior and exterior use. Come in Redwood, Mahogany, Sage, Driftwood and Cedar—or custom intermixes for the creation of your own tones.

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IMPORTANT NEWS

See and appreciate how Rez heightens natural wood beauty, gives new depth, a new dimension to wood.

Recognized architects, designers, builders and painting contractors should write to the Monsanto Chemical Company, Merchandising Division, 800 North 12th Street, St. Louis, Missouri, for the Wood Chip Set P-1 illustrated above. Be sure to make your request on the letterhead of your firm or the firm you represent.

exterior material gives the house a feeling of solidity. . . ."

► **Eichler Homes**, Palo Alto, Calif. and Architects **Jones and Emmons**. Price: \$17,950. "Spaciousness of the house is enhanced by its exposed structural system."

► **Wirsching Realty & Construction Co.**, Indianapolis, and Architects **Fran E. Schroeder & Associates**. Price: \$17,900. "The traffic circulation . . . is particularly commendable. . . ."

California sprinkler system

California builders, hustling along at an increasingly incredible pace, were moving more and more toward a policy of spreading their work over several communities. Some examples:

► **Whitecliff Homes** and its affiliated companies (headquarters: Mountain View, Calif.) put up 653 units last year—a lot of them for about \$9,000—in nine communities. Two of the most popular models in their largest project in Vallejo were a three-bedroom conventional ranch and a split-level. "Our program . . . was kept flexible enough to meet the many governmental financing changes," said President **Paul C. Petersen**, "and in all cases our sales program was well in advance of our construction." Petersen sees expansion in '55. Among projects being considered: a 300-unit minority housing development in the Bay Area.

► **George M. Holstein & Sons** of Costa Mesa hit 410 starts, using three **Cliff May** plans in five communities, with the houses selling for between

Harbor Photo Lab



PREFAB AMONG THE ORANGE GROVES

\$13,500 and \$16,500 (see cut, above). The **Cliff May** Magazine Cover Home was "without question our outstanding home of the 1954 program," according to President **George M. Holstein III**. The company also finished up 801 Wherry Act units in Las Vegas, planned bigger doings for '55. It had started processing more than 1,000 lots in Anaheim in Orange County.

► **Pardee-Phillips Construction Co.** of Los Angeles started 643 Forever Houses last year, about half of them in Las Vegas, the others in three other places. The house is the **A. Quincy Jones-Frederick Emmons** home that won an NAHB design award (with Pardee-Phillips as builder) at the Chicago convention (see cut). The builders

Julius Shulman



NAHB DESIGN WINNER AT LAS VEGAS

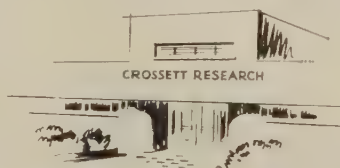
plan to increase production during '55, using a somewhat larger Forever House priced at between \$14,000 and \$16,000 in California and Nevada.



For the irresistible Selling appeal of Beauty where it Counts . . . you can depend on ROYAL OAK FLOORING

That's because the beauty and dignity inherent in oak are brought into full play by refinements conforming to Crossett standards, developed through intensive research. And it is the sum of these refinements, reflected in the finished floor, which sparks the spontaneous admiration for Royal Oak Flooring and converts your prospect into a buyer.

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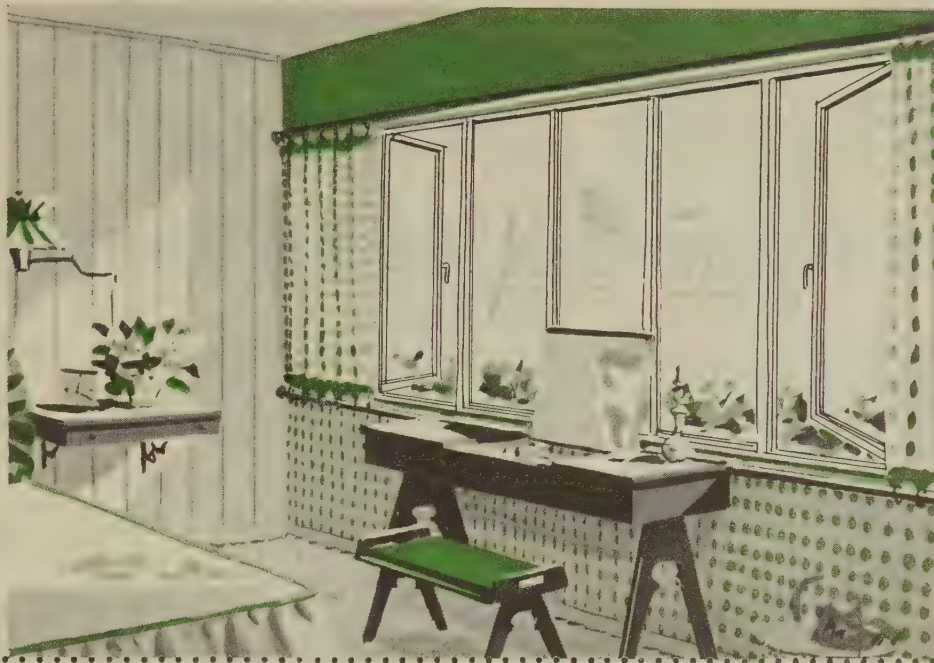
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data sent
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ROYAL OAK CROSSETT, ARK. CLEAR WHITE 5' ROYAL OAK

The
TOUCH
of
QUALITY
that
sells houses



Quality Approved ALUMINUM WINDOWS

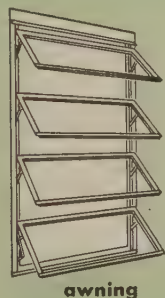
Today, *Quality* is more important than ever in selling a new house. No longer will home buyers, FHA officials and mortgage bankers accept just any kind of workmanship, any kind of materials in new houses. They want *QUALITY!*

And when it comes to windows, your best bet is "Quality-Approved" aluminum windows—windows that have been designed and constructed to meet recognized quality standards—windows that have been tested and approved by a well-known, independent laboratory for quality of materials, for construction, for strength of sections and for minimum air infiltration.

To make your houses more saleable, give them the magic "touch of quality." Include "Quality-Approved" aluminum windows (awning, casement, double-hung, projected or sliding), complete with screens and storm sash as part of a complete single-package mortgage. You'll be glad if you do.

For additional information, consult Sweet's or any of the manufacturers listed below, or write direct to Dept. HH-53.

Aluminum Window Manufacturers Association
74 Trinity Place, New York 6, N. Y.



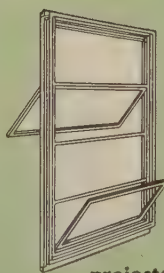
awning



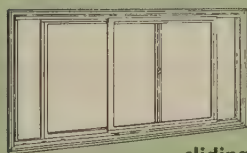
casement



double-hung



projected



sliding

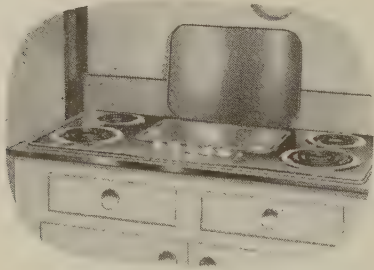


MEMBERS: Alcasco Products, Inc., Muskegon, Mich. • Aluminum Home Products Co., Knoxville, Tenn. • The Wm. Bayley Co., Springfield, Ohio • Ceco Steel Products Corp. (Sterling Aluminum Window Division), Chicago, Ill. • Cupples Products Corp., St. Louis, Mo. • Fenron Industries, Inc., Seattle, Wash. • Michael Flynn Mfg. Co., Philadelphia, Pa. • General Bronze Corp., Garden City, N. Y. • Hunter Mfg. Corp., Bristol, Pa. • Metal Arts Mfg. Co., Inc., Atlanta, Ga. • Reynolds Metals Co. (Parts Division), Louisville, Ky. • J. S. Thorn Co., Philadelphia, Pa. • Universal Window Co., Berkeley, Calif. • Ware Laboratories, Inc., Miami, Fla. • Windalume Corp., Kenil, N. J.

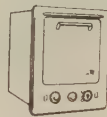


*Increase Desirability
and Value of any size
kitchen—old or new!*

L&H Custom-Bilt* Electric Range



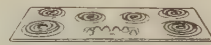
Ask about the five cooking tops
(with or without middle griddle or
convertible deep-well cooker),
automatic oven, and convenient warming
drawer, all in lifetime stainless steel.



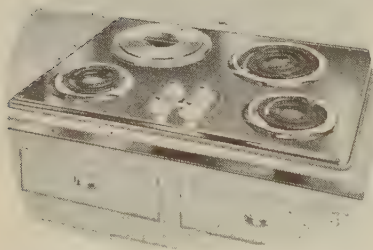
Waist-high
oven



Four units
with middle griddle



Six surface
units



Versatile
warming drawer



Three units
Convertible Duo-Cook

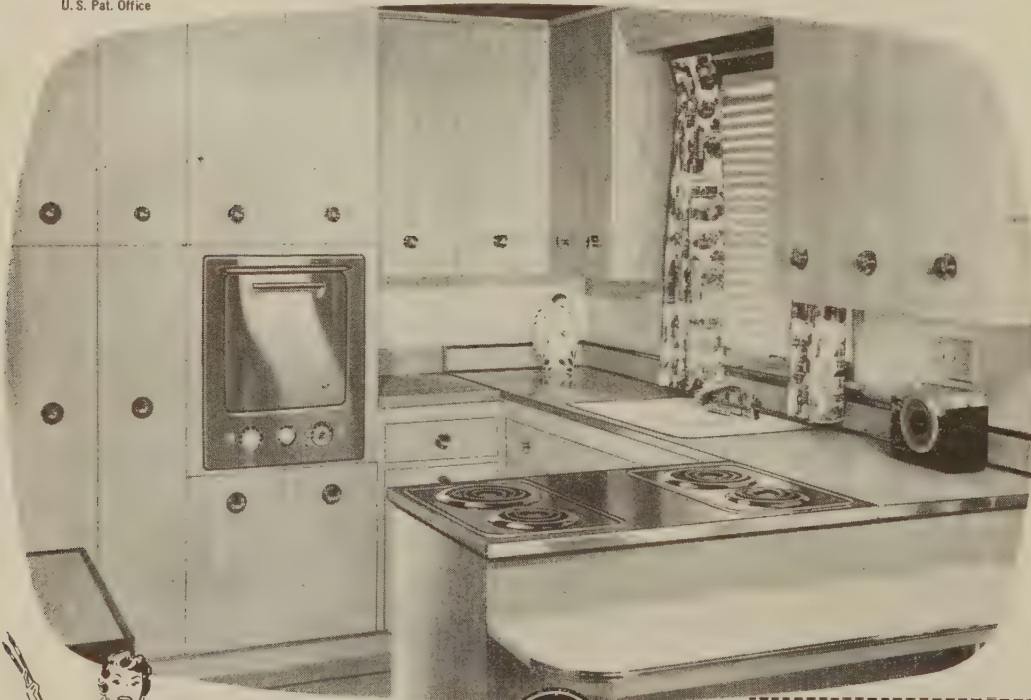


Compact
four units



Two units with
remote control
switches. Can be
used in multiples in
any arrangement.

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8 exciting
Decorators'
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in attractive porcelain
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EVENTS

Prefabricated Home Manufacturers' Institute, spring meeting, **March 26-30**, on board *Queen of Bermuda*, en route to Bermuda.

Mortgage Bankers Assn., Southwestern mortgage conference, **March 28-29**, The Mayo Hotel, Tulsa; Southern mortgage clinic, **March 31-April 1**, The Dinkler-Tutwiler, Birmingham, Ala.; Eastern mortgage conference, **May 2-3**, Hotel Commodore, New York, N.Y.

American Institute of Architects, board of directors meeting, **March 29-April 1**, AIA headquarters, Washington, D.C.

American Institute of Planners, annual meeting, **March 30-April 2**, Muehlebach Hotel, Kansas City, Mo.

Southern Pine Assn., annual convention and exposition, **April 4-6**, New Orleans.

Lumbermen's Association of Texas, annual convention and exposition, **April 3-5**, Fort Worth.

Indianapolis Home Show, **April 15-24**, Cattle Building at the Fairgrounds, Indianapolis.

1955 Builders Show, **April 15-24**, State Fair Grounds, Detroit.

Building Officials Conference of America, annual conference, **April 17-21**, Milwaukee.

Building Research Institute, annual meeting, **April 18-19**, Woodrow Wilson Hall, Princeton University, Princeton, N.J.

American Institute of Architects Exhibit of Architectural Photography, **May 20-24**, AIA Gallery, Washington, D.C. Entries (maximum of three) must be received by Monday, **May 2, '55**, must be shipped to Mrs. Alice G. Korff, Curator of Gallery, AIA, 1735 New York Avenue, N.W., Washington 6, D.C. Photographic prints must be black and white, semi-matte finish, and mounted on double-thick white illustration board, 16" x 20". Eligible: all professional photographers with work published in national publications within the last five years. Entry fee: \$5. Photographic content: an architectural subject, but might also feature related art forms such as mural painting, sculpture, fountains, landscape architecture. Each photograph must be labeled with name and address of photographer, name and location of building, name and address of architect and date photograph was taken.

Forest Products Research Society, annual meeting, **June 20-23**, Seattle.

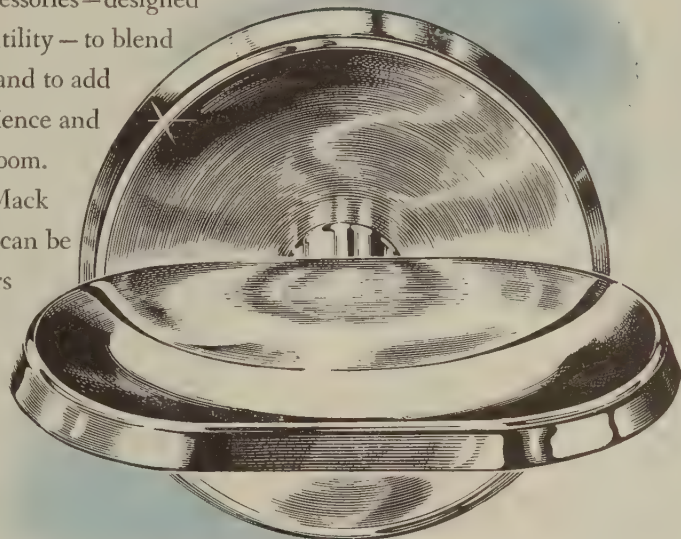
National Association of Home Builders, fall directors' meeting, **Sept. 23-26**, Denver.

National Retail Lumber Dealers Assn., annual convention, **October 11-16**, Cleveland Auditorium, Cleveland.

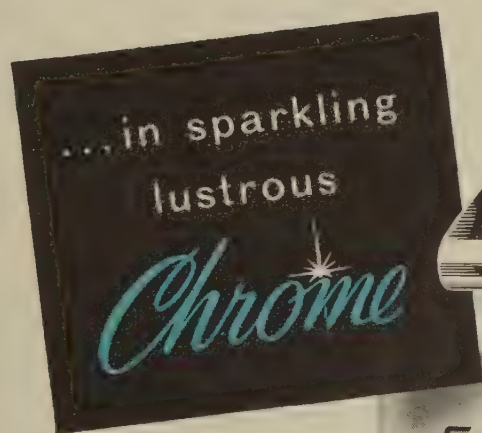
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The gleaming lustrous beauty of Hall-Mack bathroom accessories creates a bathroom of distinctive charm. In Hall-Mack's complete selection you'll find many unique, special accessories—designed to combine beauty with utility—to blend with any style or color—and to add the final touch of convenience and permanence in any bathroom. When you specify Hall-Mack bathroom accessories you can be sure of quality—and years of useful service. Specify Hall-Mack always!

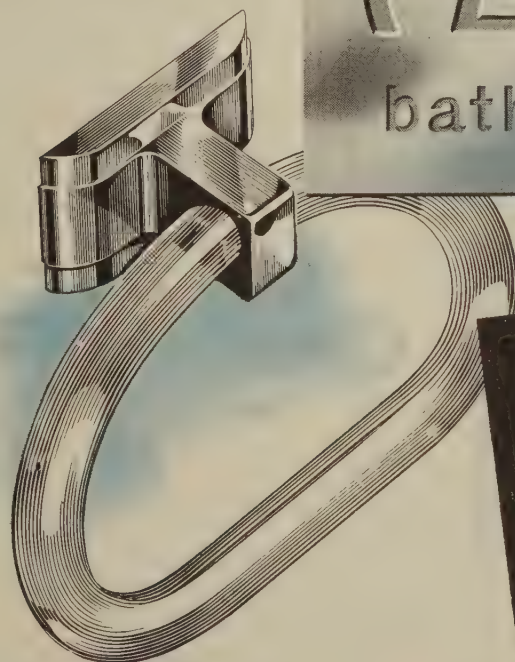
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1. It is good weatherstrip 2. It permits easy sash removal
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- This equipment permits the use of stock windows which eliminates the necessity of having special mill work

Ideal for shoulder high windows . . . in bathrooms, kitchens, bedrooms. Horizontal sliding windows equipped with No. 890 ALL-Glide are E-X-P-A-N-S-I-B-L-E. They can be easily stacked.

ALLWEATHER Balance Strip with FLOCKED COIL SPRINGS

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Ajustability is built-in. Balance tube with semi-cantilever action insures weatherstrip contact in all kinds of weather. The base section is always in close contact with jamb insuring stability. FLOCKED COIL SPRINGS are concealed by a functional part of the strip itself.

Tests made by the University of Minnesota Institute of Technology Testing laboratory in cooperation with the Weatherstrip Research Institute, show that double-hung wood windows, when metal weatherstripped show an infiltration ratio 6 TIMES LESS than non-weatherstripped windows.



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Architectural File • Light Construction File

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LETTERS

REPLY FROM THE WHITE HOUSE

Sirs:

The President has asked me to thank you for your letter to him on behalf of the home-building industry as it appeared in the January issue of *HOUSE & HOME*.

The President wants you to know that the substantive matters in your letter will be carefully gone over by appropriate officials in order to ascertain how the housing program can be improved to achieve the goal which you and all of us desire.

SHERMAN ADAMS
*The Assistant to the President
The White House
Washington*

FORTHRIGHT AND COURAGEOUS

Dear Sirs:

This is certainly a very forthright and courageous statement, and I think it is well to bring matters of this kind to the attention of the Chief Executive.

As you indicate, I am sure he does not have time to look into all problems and is dependent on others for much advice.

GEORGE P. MACNICHOL JR., *president
Libbey-Owens-Ford Glass Co.*

Sirs:

Your "Open Letter to the President" presents compelling arguments for a complete revitalization of FHA.

Most mortgagees do business today with FHA only because they have to. Many attempt to dissuade borrowers from FHA filing because of slow processing and burdensome underwriting requirements.

Statisticians say FHA applications are way up, but I feel sure a great many of these applications do not materialize into finally insured mortgages. Most builders use FHA only for local construction loan purposes, and a substantial number of FHA applications wind up as conventional or VA loans.

MAURICE R. MASSEY JR., *president
Peoples Bond & Mortgage Co.
Philadelphia*

Sirs:

. . . Excellent.

JOSEPH A. GRAZIER, *president
American-Standard*

LACK OF UNDERSTANDING

Sirs:

Congratulations on a job well done. We have been concerned for some time over the apparent lack of understanding of the housing problems on the part of those heading up the President's administration, and anything that can be done to correct this must

LETTERS

be considered a major and a timely effort.

There were a lot of things wrong with the 608 program but also a lot of good that came out of it. Aside from getting an adequate supply of rental housing, it did more to check public housing than any one thing.

We find it is almost impossible now to interest builders in rental housing, though there is certainly a need for it. Also, something should be done to stimulate housing for retired people. Otherwise, that will be the next big public housing effort. These and other housing problems seem to be beyond the scope of our present head of the HHFA.

J. C. TAYLOR JR., *chairman*
American Houses, Inc.
New York City

Sirs:

I concur with every word in this splendid article.

WM. G. FARRINGTON
Tanglewood
Houston

SUPPORT FOR FHA

Sirs:

Not only the construction industry, but the home owners of the country have benefited from FHA. It must not be allowed to be corrupted by political selfishness, which is more dangerous than the isolated instances of financial corruption of a few employees.

I hope the trade associations in the building material field are giving you support.

CHESTER C. KELSEY, *manager*
Asbestos-Cement Products Assn.
New York City

Sirs:

Congratulations on the very able way you presented this very serious problem.

H. LEIGH WHITELAW, *managing director*
Gas Appliance Manufacturers Assn.

Dear Sirs:

I sincerely feel that you have taken steps in the right direction. . . . Your letter to the President covers the matter very thoroughly.

HENRY A. JOHNSON
US Rubber Co.

Sirs:

There is plenty of room for improvement in the housing program currently being followed by the administration.

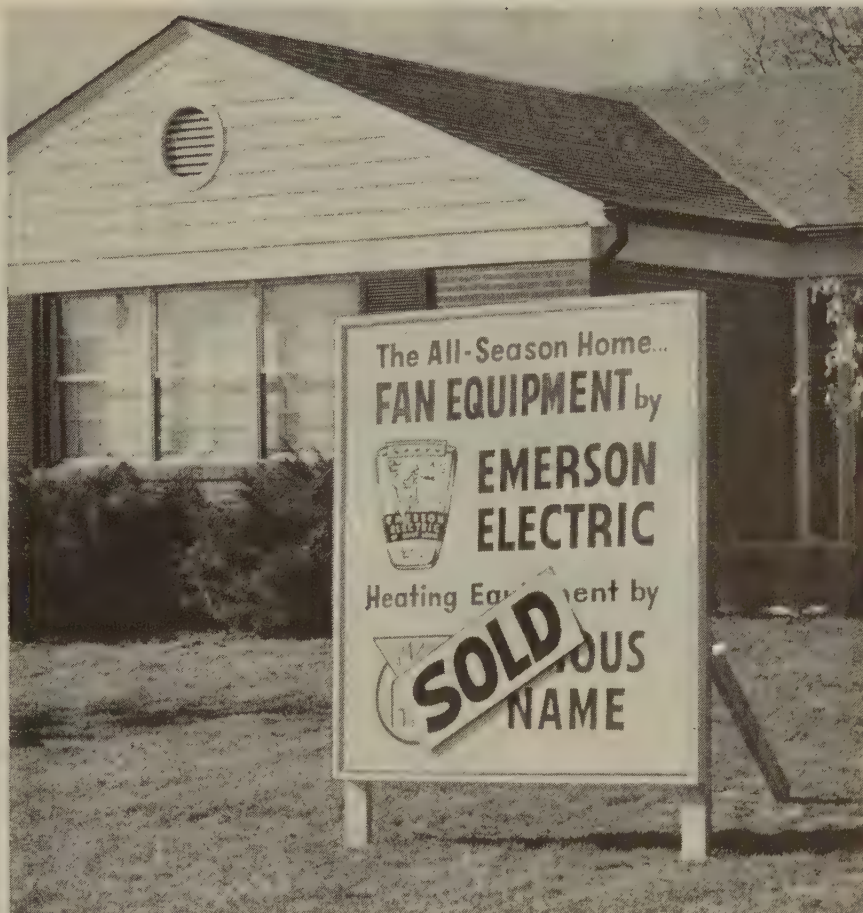
DAVID S. MILLER, *vice president for sales*
Kawneer Co.

Sirs:

The industry has taken unnecessary abuse and a consequent loss of prestige as a result of sitting by so quietly. Your editorial is exactly what needed saying.

MRS. HENRY T. CHALARON
New Orleans

continued on p. 94



What's in a name?

As an experienced builder, you know that the right name is often a powerful selling "tool." Take Emerson Electric fans, for instance:

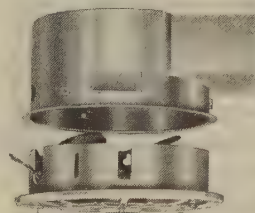
You don't have to "sell" this famous name in fans—it sells for you! For over 60 years the Emerson Electric reputation for quality, performance and unfailing service has stood unchallenged. Everybody

knows and immediately accepts this first name in fans. Use this acknowledged fact as an asset that costs no more—add the reputation of Emerson-Electric to your own. You'll find it pays! There's a built-to-last Emerson-Electric unit for every home use. Send for Emerson Electric Fan Bulletin No. 1004. THE EMERSON ELECTRIC MFG. CO., ST. LOUIS 21, MISSOURI.

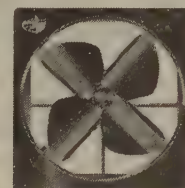
MODELS FOR EVERY VENTILATING SERVICE



The Emerson-Electric Built-In Ventilator with Wall Sleeve is easily installed in brick, masonry or frame kitchen walls. Decorative grille blends with modern kitchen equipment.



The Emerson-Electric Ventilator for Ceiling Installation—designed for kitchens, game rooms, laundries and bathrooms. Can be furnished with or without sleeve and outside grille.



The Emerson-Electric Attic Fan is made for economical over-all summer cooling. Suitable for either horizontal or vertical mounting—blade sizes from 24-in. to 48-in.

Emerson-Electric
of St. Louis



the eyes buy...

sell the preferred Visible Feature!

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WASTE KING PULVERATOR

AMERICA'S FINEST GARBAGE DISPOSER

WASTE KING, like this housewife, is a deciding factor in the sale and rental of homes and apartments. Homemakers LOOK for this modern convenience that saves time, saves steps, saves work — that eliminates garbage electrically.

Sell quicker, rent quicker. Show buyers WASTE KING Pulverator. It's the lowest budget, highest quality feature that upgrades the value of the home or apartment.

SUPERIOR WASTE KING FEATURES

SUPER "HUSH-CUSHIONS"—an exclusive WASTE KING feature. Noise and vibration absorbed at sink connector and drain outlet.

LIFETIME GRIND CONTROL—exclusive design controls size of waste particles. Plumbing Lines Protected. Longer Life! Clogproof!

UNBEATABLE SERVICE RECORD—less than 1% service callbacks. Customer satisfaction assured! WASTE KING quality is unsurpassed!

SELL UP THE
PREFERRED VISIBLE FEATURE



Over 500,000
in Daily Use!



MODEL SM7000 SHOWN

A Product by GIVEN Mfg. Co., Los Angeles 58, Calif., Largest Producer of Garbage Disposers in America!



LETTERS *continued from p. 93*

Dear Sirs:

Your succinct, restrained, yet razor-sharp analysis of this most unbelievable situation is indeed a masterpiece. . . .

The fact that H&H occupies its present and ever increasing position in the housing field becomes more understandable.

ROBERT W. CLEMENS
Houston

CONTEMPORARY DESIGN PENALTIES?

Sirs:

In a recent meeting of the Houston Home Builders Assn. and the FHA, the question was asked: "When is FHA going to 'smile' on contemporary houses?" The answer: "The FHA has no objection to contemporary design. *The problem is market acceptance.* We welcome discussion with the builder and his architect on this matter and we can issue commitments on contemporary designs." But they don't say what size commitments and we feel that our builders might be penalized by going to contemporary designs at this time.

M. L. WESTBROOK, president
Southwest American Houses, Inc.
Houston

YOUNG AND BUSY

Sirs:

I'm irate over the gratuitous dig in "Pulse of the market: Miami" (H&H, Nov. '54, p. 50). "Both [Miami and Phoenix] are winter resort and retirement towns with not much industry and moderate incomes."

At the end of 1953, Greater Miami had 1,140 factories employing an average of 22,600 workers and with total payroll of \$65,000,000. Value added by manufacture was \$154,000,000.

The Bureau of Census and Dept. of Commerce gave this table after the 1950 census:

| | Miami age groups | US age groups |
|------------------|---------------------|------------------|
| Under 5..... | 8% | 10.8% |
| 5- 9..... | 7% | 8.8% |
| 10- 14..... | 5% | 7.5% |
| 15- 24..... | 12% | 14.6% |
| 25- 34..... | 17% | 15.7% |
| 35- 44..... | 17% | 14.1% |
| 45- 64..... | 25% | 20.2% |
| 65 and over..... | 9% | 8.2% |

JOHN T. BILLS, business and financial editor
The Miami Herald

BEST METHOD

Sirs:

Our experience has been that the best method to handle modernization (H&H, Oct. '54) is through the joint and respectful co-operation between contractor, material supplier and financing agency, to achieve the lowest cost and best result for the home

continued on p. 102

there is no substitute for

Texture One-Eleven® EXTERIOR FIR PLYWOOD • EXT-DFPA

**...the exciting new panel material
that combines line and texture**



Since its introduction only a few months ago, Texture One-Eleven® has been enthusiastically received by architects and builders. Here are examples of the many exciting things being done with this striking new material.



Texture One-Eleven siding combines high style with the strength, durability and economy of dependable Exterior fir plywood.



Equally effective for patio fences, gable ends and soffits, Texture One-Eleven contrasts well with masonry and other materials.



Texture One-Eleven meets FHA requirements for combined siding and sheathing which permits major construction economy.



T 1-11's bold parallel groove pattern and subtle surface texture adds drama and interest to residential and commercial interiors.

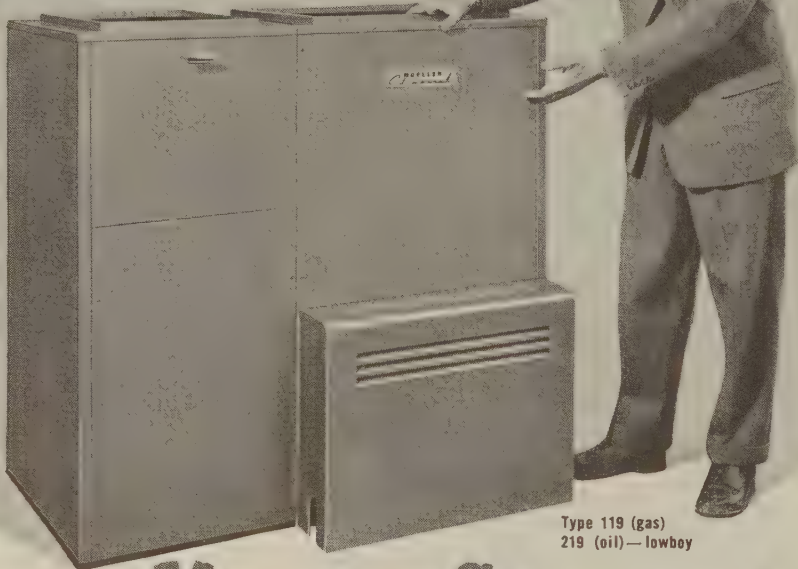


Texture 1-11 siding weathers well, surface texture is enhanced by exposure. Glue is completely waterproof and weatherproof.



Builders of special demonstration homes report home buyers are equally taken with striking beauty of new Texture One-Eleven.

Attractive...
in Size
Appearance
and Price!



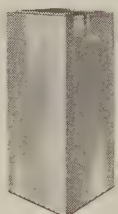
New Mueller Climatrol Suburbanaire Line

lets you include Mueller Climatrol quality
 without extra cost

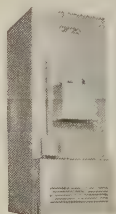
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B-89

LETTERS *continued from p. 94*

owner. None of the participants need dominate the field.

CHARLES LAMPLAND, *vice president*
 Lampland Lumber Co.
 Saint Paul, Minn.

Sirs:

Enjoyed your modernization issue. Obsolete rhymes with DEFEAT. . . .

FORREST RADCLIFFE, *realtor*
 Los Angeles

LIBERAL FHA

Sirs:

I'm glad to hear that FHA is liberalizing its policy toward contemporary design. We were not aware of it, since our houses (H&H, Nov. '54) have had no FHA financing, but it encourages the idea of going to talk to them.

W. DANFORTH COMPTON
 Compton & Pierce, *architects*
 Cambridge, Mass.

ONE FOR THE ARCHITECT

Sirs:

Your design issue (H&H, Sept. '54) was one of the best you have done. It made me appreciate what our architect does. For the first time, I can see some of the reasoning behind his recommendations.

HAROLD H. SAMPSON
 Sampson-Miller Associated Companies, Inc.
 Pittsburgh

AIR CONDITIONING

Sirs:

I would appreciate your sending the reprints of your air-conditioning data as it should be valuable in my work. Incidentally, I use your magazine to illustrate points in discussing air conditioning with my clients and find it useful.

JACK MILLER, *mechanical engineer*
 Los Angeles

ERRATA

Sirs:

The Modern Home photo (H&H, Jan. '55, p. 165), credited to Clair J. Wilson, should have been credited to Lens-Art.

MASON PAWLAK
 Lens-Art Photographers
 Detroit

Sirs:

Computing the HEF for the University of Illinois test home (H&H, Jan. '55), I am unable to come out with the 9.1% you give. Is there an error?

JOHN H. BOLLINGER
 Fostoria, Ohio

• H & H regrets that there is an error: 9.1 should read 9.7.—ED.

house+home

March, 1955

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Architect Marcel Breuer's small house at Croton, N. Y. contrasts colors, forms, surfaces, fenestration, open and closed spaces, handsomely.

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120 LUMBER DEALER DEVELOPS RAW LAND FOR SMALL-VOLUME BUILDERS

W. H. Sawyer of Worcester, Mass. sells land to his customers so they can use his materials, developed 26 acres last year on which 28 builders erected 231 houses.

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First in a series presenting new building techniques designed to cut costs and improve the final product—the house.

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142 WHAT KIND OF MAN IS NAHB'S NEW PRESIDENT?

Earl W. Smith, who calls himself "just a carpenter," grew to be fourth largest builder in the US on the strength of his low-priced flat tops and his mobile operation.

148 ARCHITECT SUPPLIES SMALL BUILDER WITH PRIZE-WINNING DESIGNS

The architect: Donald Honn of Tulsa; the builders: R. B. Walden and Cecil Jennings of Lubbock, Tex.; the prize: Parent's Magazine's award for houses over \$16,000.

152 REPORT FROM AIR-CONDITIONED VILLAGE

A house-by-house analysis shows that the air-conditioning units in the Austin, Tex. experimental village were handicapped in many instances by poor installation and poor design for cooling.

158 NEW TRUSS FOR LOW ROOFS

The Small Homes Council of the University of Illinois develops a glued truss with plywood gussets that uses nails only to hold it together till the glue dries.

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Architect Edward H. Fickett designs a luxury house for the GMB Corporation of Los Angeles, employs economical building techniques.

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Foil-faced, half-inch, 4' x 8' sheets offer continuous vapor sealing and insulation which has worked well for four years of tests in Minneapolis.

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Gas fights against its competition by improving its appliances.

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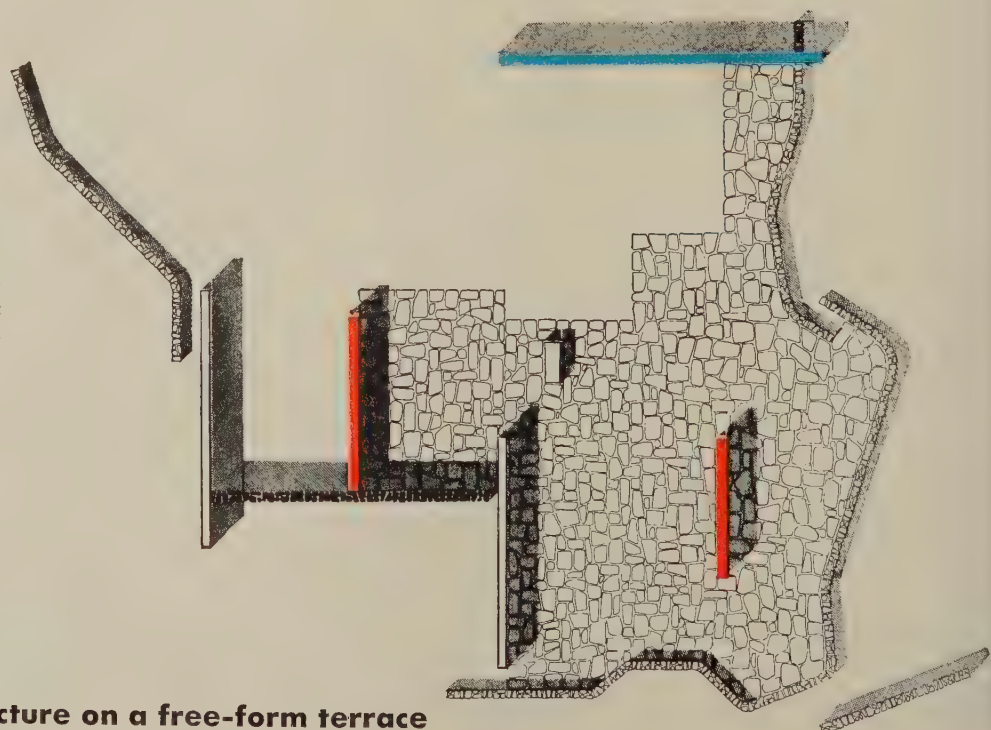
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CONTRASTS IN COLOR: reds and blues against a green landscape

Diagrammatic plan shows free-form terrace, flagstone-paved areas and concrete block walls painted brilliant red, blue or white. This diagram helped architect to determine exact balance of color, texture and form.



CONTRASTS IN LINE: rectangular structure on a free-form terrace

SIMPLER CONTRASTS

make for greater drama

Photos: Ben Schnall



CONTRASTS IN TEXTURE:

smooth planes and rough stone

When the late Gertrude Stein announced that “a rose is a rose is a rose,” it was not because her needle was stuck. She had a very good point, and that point is also the point of this house.

For when Architect Marcel Breuer finished this handsome job he had said, in effect, that “a house is a house is a house.” He had *not* tried to make the house look like a part of the landscape. He had *not* tried to use colors that would match the colors of trees and grass. He had *not* tried to use materials, or textures, or forms that would blend easily with nature.

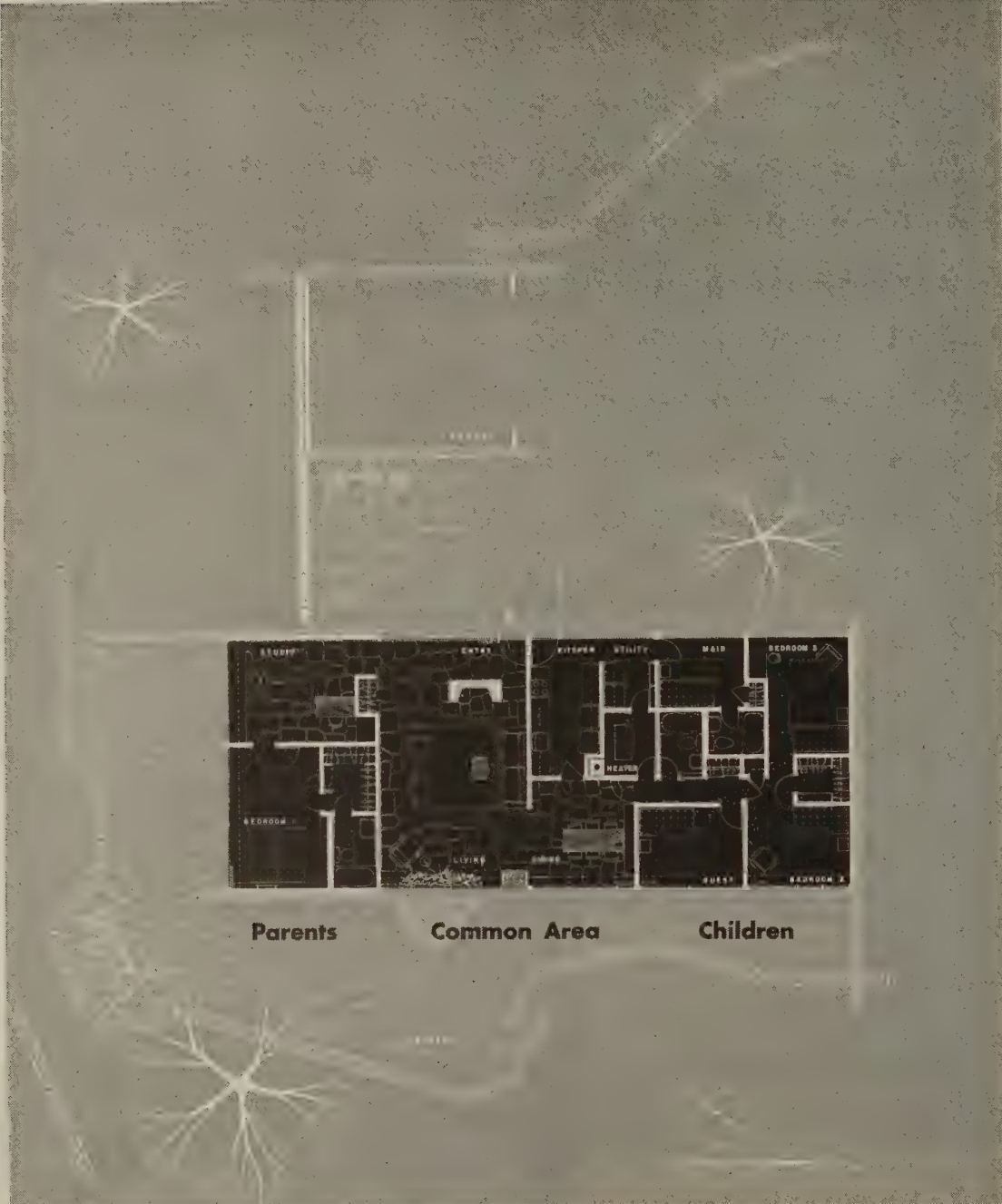
He had built a modern house, and he had made it look man-made.

To many of Breuer’s contemporaries, this is heresy. They believe that a house should blend with nature in its colors, lines, textures and forms. Breuer’s answer is that imitation is not always the sincerest form of flattery: trees and rocks look more beautiful against a backdrop of geometric planes — and vice versa.

The danger, of course, is that excessive contrasts can lead to confusion. To get harmony by contrast instead takes a great deal of art. These pictures show how much art it took in this case.

LOCATION: Croton-on-Hudson, N. Y.
MARCEL BREUER, architect
AUGUST NELSON, general contractor

CONTRASTS IN PLAN:
open spaces and
private compartments



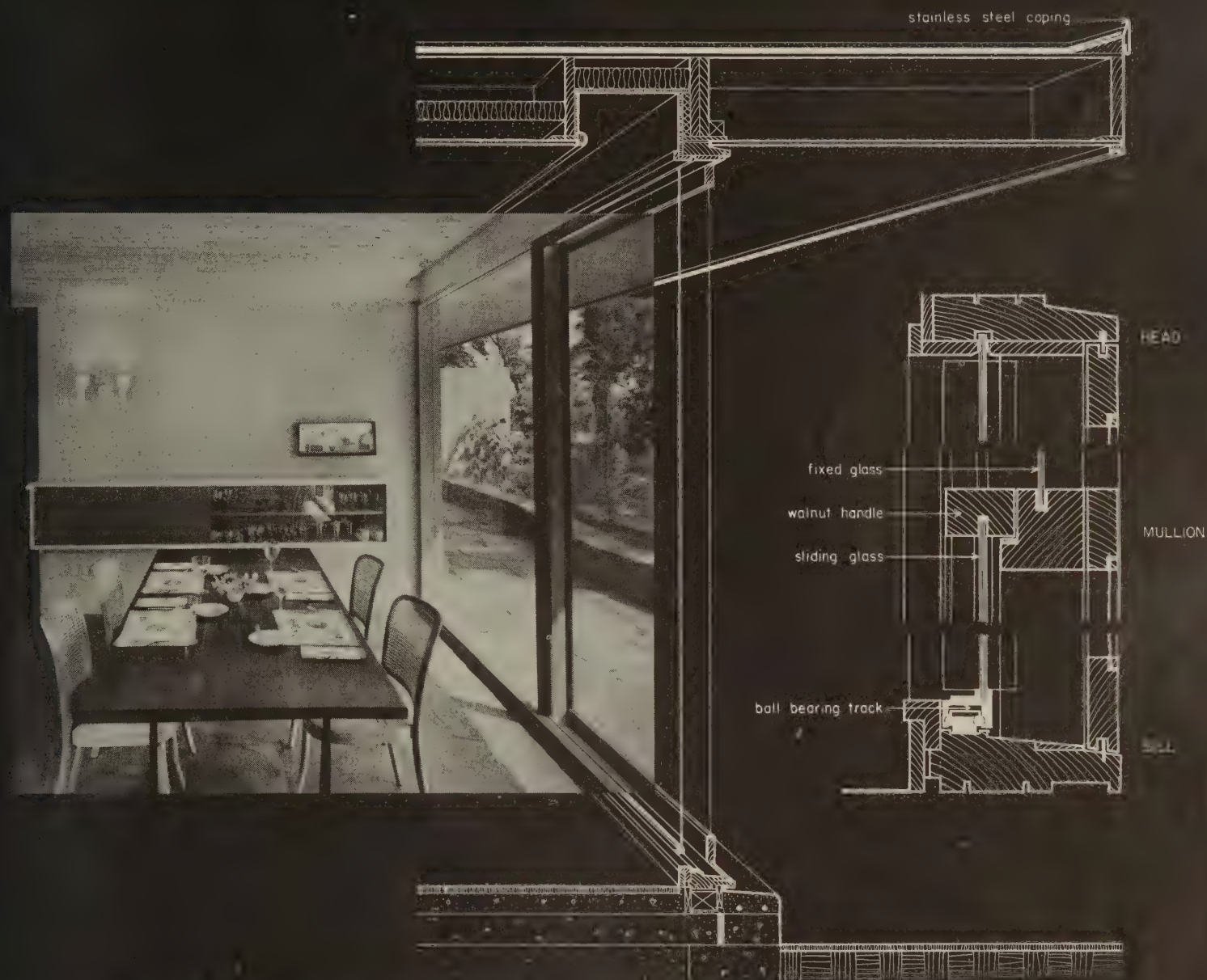
Photos: Ben Schnall



Convinced that both parents and children need privacy from each other, Breuer likes to keep them apart in separate areas. The parents occupy a closed-off, private apartment at one end of the plan, while the children's bedrooms are located at the other end. (Actually, the problem was somewhat different in this particular house, but the basic planning principle still applies.)

As the children grow up they use their rooms as an apartment in which they can entertain without bothering their parents. The only time the children should sleep next to the parents, Breuer thinks, is during infancy. His parents' apartments therefore have space for a crib.

Contrasting textures add interest to living areas (left): floors are flagstone, fireplace is brick, walls are plaster, ceilings are cypress. Red concrete block wall is just visible through glass in rear of room. Interior colors are white and gray.



CONTRASTS IN FENESTRATION: matching windows and set-off screens

Breuer has now perfected his frameless sliding glass windows to the point where he can even use the details in floor-to-ceiling glass walls. The vertical edge of the glass is protected by a strip of walnut that acts as a handle (see above).

He solves another fenestration problem with equal directness: no facade detail is quite so disturbing as a series of windows and screens whose frames are of almost—but not quite—the same thickness. This is a difficult detail to solve; by making his sliding screen frames deliberately heavy and painting them black, Breuer has turned the problem to his advantage, made the contrasting patterns a design asset (see picture at right). In the winter, on the other hand, when the screens can be lifted out and stored, the glass areas present a regular pattern of identical openings: for then the fixed and sliding units are both exposed, and from a distance the two look alike.





Photos: Ben Schnall

CONTRASTS IN LIGHT:

a spot of sunshine on a shaded wall

Breuer thinks that a tree is more a tree when seen against a simple, geometric backdrop, that green is more green when contrasted with blue or red, that light is more light when contrasted with shade. An architect does not necessarily show his love for nature by competing with her, he believes. He prefers to dramatize the beauty of natural forms by holding them up to clearer view.

This is not a new device: Shakespeare liked to contrast and relieve a tense scene with Falstaff's humor; indeed, every artist—whether painter, sculptor or musician—knows the effectiveness of contrast. The only thing that is new is the means employed, the boldness of lines, forms and colors, and the clarity of detail.

In Breuer's book "harmony by contrast" must never mean compromise. Sun and shadow, he says, do not add up to a gray and cloudy sky. Both are part of our lives, both have their own identities. Breuer tries to present opposing aspects of a building problem with equal force and equal clarity. He believes that the resulting play of contrasts is what makes architecture interesting.



CONTRASTS IN FORM: geometric forms in architecture, organic forms in nature





Round Table urges 22 major changes in housing legislation and policy

Among the Round Table's more revolutionary proposals are:

1. Insist that buyer, builder and lender share in the risk to get federal financing help;
2. Reorganize FHA as a quasi-public insurance corporation and change its name;
3. Let the Home Loan Banks set up their own separate plan to insure high-percentage conventional loans;
4. Let both reinsure their portfolios with government (instead of so insuring each mortgage);
5. Divorce FHA from HHFA;
6. Let a nonpolitical board change FHA and VA interest rates, but do not give such power to the President;
7. Start getting FHA out of Title I insurance;
8. Think twice before extending VA housing benefits unchanged;
9. Stop taxing professional builders out of apartment construction.

Here, in 22 recommendations and 16 forthright questions-and-answers, is advice President Eisenhower would get if he were to consult his own Advisory Committee on Housing Policy.

Here too is their advice to the homebuilding industry.

Taken together these recommendations come very near adding up to a completely new housing program. They cover almost every aspect of the industry, from the FHA investigation to public housing, from rent control to housing research. They propose more help to homebuilding at less risk to the government. They call for more government help where more help is needed and less help where it is not.

This program was developed at an extraordinary HOUSE & HOME Round Table in whose recommendations 17 of the 21 living members of the President's Committee joined, as did today's president and first vice president of the Mortgage Bankers' Association, today's president of the National Association of Real Estate Boards, today's president of the United States Savings & Loan League, and the designated representatives of the American Bankers' Association, the Life Insurance Association of America and the American Life Convention, the National Association of Mutual Savings Banks, the National Retail Lumber Dealers' Association, the National Savings & Loan League, and the Prefabricated Home Manufacturers' Institute.

The panel

Members of the President's Advisory Committee on Housing Policy

GEORGE L. BLISS, *chairman*
Legislative committee
US Savings & Loan League

ERNEST BOHN, *director*
Cleveland Metropolitan Housing Authority

MILES L. COLEMAN
construction economist

A. R. GARDNER, *past president*
Federal Home Loan Bank of Chicago

RICHARD G. HUGHES, *past president*
National Assn. of Home Builders

RODNEY LOCKWOOD, *past president*
National Assn. of Home Builders

WILLIAM MARCUS, *past president*
Savings & mortgage div., American Bankers Assn.

ROBERT M. MORGAN, *past chairman*
Committee on mortgage investment
National Assn. of Mutual Savings Banks

THOMAS W. MOSES, *chairman*
VA housing committee
American Legion

ROBERT B. PATRICK, *vice president*
Bankers Life Co.

JAMES W. ROUSE, *director*
Mortgage Bankers Assn.

BRUCE SAVAGE, *realtor*

JOHN J. SCULLY
vice president in charge of real estate
Chase National Bank

ALEXANDER SUMMER, *past president*
National Assn. of Real Estate Boards

RALPH WALKER, *AIA past president*
American Institute of Architects

PAUL R. WILLIAMS, *AIA*

BEN H. WOOTEN, *president*
First National Bank, Dallas

Association representatives:

AMERICAN BANKERS ASSN.

COWLES ANDRUS
Committee on real estate mortgages

LIFE INSURANCE ASSN. OF AMERICA AND AMERICAN LIFE CONVENTION

MILFORD A. VIESER, *chairman*
Joint committee on housing & mortgage lending

MORTGAGE BANKERS' ASSN.

WALLACE MOIR, *president*
LINDELL PETERSON, *first vice president*

NATIONAL ASSN. OF MUTUAL SAVINGS BANKS

HARRY HELD, *chairman*
Committee on mortgage investment

NATIONAL ASSN. OF REAL ESTATE BOARDS

HENRY G. WALTEMADE, *president*

NATIONAL RETAIL LUMBER DEALERS

RAYMOND SCHAUB, *first vice president*

NATIONAL SAVINGS AND LOAN LEAGUE

CHARLES WELLMAN, *legislative committee*

PREFABRICATED HOME MANUFACTURERS' INSTITUTE

JAMES R. PRICE, *past president*

US SAVINGS & LOAN LEAGUE

J. HOWARD EDGERTON, *president*

Moderator

P. I. PRENTICE, *editor & publisher*
HOUSE & HOME

The Round Table report:



The less help our industry has to accept from government, the better for our industry

For 20 years now we have been forging a closer and closer partnership with government through the Home Loan Bank Board, the Federal Savings and Loan Insurance Corporation, and especially through FHA and VA. That partnership has enabled millions of families to buy better homes for less money. Perhaps more important, it has enabled our industry at long last to enter the industrial revolution and begin offering home buyers the efficiencies and savings of quantity production.

Our partnership has yet to cost the taxpayer a penny

And because the partnership has yet to cost the taxpayer a penny, many of us had thought it safe to let the government take more and more of the risk. We have allowed builder, lender, and buyer—all three—to profit from the partnership without putting up as much of the money or carrying as much of the risk as they could and should.

We are now unanimous in declaring this was and is a mistake. Free enterprise in homebuilding cannot prosper and expand on public risk for private profit. We cannot afford to let government carry more of the risk than is inherent in the very nature of our government and our increasingly political economy.

Instead of increasing our reliance on government, we must prepare to take more responsibility to lessen our dependence on government—for if government takes all the risk government will take more and more complete control.

Now is the time for a complete reappraisal

The critical headlines of the past ten months have made it all too clear that our industry can no longer postpone a complete and soul-searching reappraisal of its position in the public's esteem, nor can we postpone an equally complete and perhaps agonizing reappraisal of our relations with the federal government and all the programs and policies developed over the past 20 years to help us meet the nation's need for better homes.

Some of the questions we asked ourselves in this reappraisal appear with our answers on pages 117, 118, 119, 166, 168, 169, 170 and 172. The transcript of our discussions will be published in part in the April issue. For our recommendations to meet the problems raised, turn the page . . .

Here is our first and basic recommendation



Bohn: *FHA was set up for the single purpose of helping more people have good homes at prices they could afford to pay.*

The first essential for a sound housing program is a clear statement of basic principle.

To that end we are unanimous in urging that everyone accept the principle of the shared risk.

No builder should be able to get government help on his financing unless he stands to lose some of his own money first if his judgment on the house proves wrong. No buyer should be able to get government help on his financing unless he stands to lose some of his own money first if the house proves a bad investment. No lender should be able to get insurance on his loan unless he stands to lose some of his own money first if his judgment proves wrong and the loan is defaulted.

Here are our recommendations for FHA

2. Get the FHA probe over quickly

We share the President's hope that the FHA investigation is almost over. It must be difficult indeed to maintain morale in its staff and efficiency in its operations with 90 investigators moving from office to office and the newspapers filled with the scandal hunt.

For 22 years FHA has been the keystone of the government's partnership in homebuilding. It is the keystone of the new Housing Act of 1954, whose every constructive new feature is predicated on FHA insurance and enlightened FHA appraisals. None of these new features will work unless the public has confidence in FHA and FHA has confidence in itself.

3. Make FHA a corporation

FHA should be reconstituted as a quasi-public corporation under the direction of a board with fixed tenure, charged with the responsibility of operating a sound system of mortgage insurance. This should be its sole function, and its management should be authorized to charge higher premiums on mortgages involving greater risks and to require special government guarantees* if public policy requires that mortgage insurance be written on projects of questionable economic soundness.

The FHA reserves should be transferred to the new corporation along with its present insurance.

(See discussion under question No. 3, page 118)

4. Government reinsurance only

FHA should then reinsure with the government against the risk of a mortgage collapse that would exhaust all its reserves. This reinsurance should be paid for by assigning to the Treasury a small percentage (perhaps 10%) of the insurance premium paid by the home owner.

The reinsurance would make the federal government's limited role clear for the first time. It would express the principle of the shared risk.

The reinsurance should require at least a token element of coinsurance.

5. Change the name of FHA

The name of FHA, which now belies its true function, should be changed at once to some more accurately descriptive title like the Federal Mortgage Insurance Corporation.

(See discussion under question No. 6, page 119)

6. Divorce FHA from HHFA

The reconstituted FHA and the Home Loan Bank Board should be made completely independent of HHFA, as they once were and as the FDIC and the Federal Reserve are independent of the Treasury. The purpose of this divorce would be to relieve both agencies of political pressures and relieve FHA of pressures to insure unsound loans.



Summer: *What knocked out the '54 program was the FHA scandal.*

*We are not here questioning the government's decision to encourage private enterprise to undertake certain types of construction it would not otherwise build. Specifically we concur enthusiastically in the government's present eagerness to stimulate better housing for minorities. We recognize the government had to stimulate defense and military homebuilding in 1951. We know the political pressures demanding rental housing for returning veterans were almost irresistible when the 608 program was launched. We recognize a housing need for families displaced by clearing slums. And we recognize that private enterprise may not meet these housing needs without a government guarantee—not because our industry would not gladly build them, but because private investors might be foolish to put their own money into them without the hope of a return so high it might defeat the very purpose of the program.

7. FHA and Title I loans

All but one of us believe that FHA should get out of Title I insurance when and where the financial institutions are willing and able to offer these home improvement loans on their own at the same 5% discount.

Experience over 20 years has demonstrated that these loans are as safe as they are profitable, and the government should always withdraw from any activity which private enterprise is ready and able to take over. Such withdrawal is a policy to which the President has often committed his administration.

To speed the take-over FHA might consider the advisability of raising its already profitable Title I premium, thereby giving the financial institutions an added incentive to carry their own insurance. The added income could well be used to police Title I more closely.

Most of us believe the open-end mortgage offers a much better way to finance home improvements than short-term personal credit.

8. FHA and quality

FHA should receive every assistance in its new effort to encourage better construction and better architecture by giving fuller recognition to quality design and quality materials in its appraisals and by giving its new preferred standards precedence over its old minimum requirements.

The first purpose of FHA was "to improve housing standards and conditions," but the deliberate and announced policy of using FHA to exert "downward pressure" on housing prices after the war eventually made FHA a major obstacle to better building.

FHA should continue to encourage lower prices, and a close look will show that some of its present minimum requirements are unnecessarily high for very low-cost homes.

9. FHA participation mortgages

FHA should begin encouraging participation mortgages, which most of us consider the one best way to handle an assignment on which FHA has so far failed—getting more mortgage money into small towns.

They assure the central lender that the best local judgment backs the soundness of the loan. They let the local lender serve his community better by multiplying his mortgage portfolio up to tenfold. They reduce costs by letting each participant perform the function he can perform most economically. The local lender relieves the distant institution of otherwise costly local credit checks and appraisals; the central lender contributes his greater familiarity with FHA and VA requirements and paperwork.

Today conflicting requirements of FHA and the controller of the currency make participation mortgages impossible. Both have indicated a willingness to modify these requirements, but so far they have not done so.

10. FHA should pay better salaries

FHA (and any successor corporation) should be allowed to pay higher salaries. The present scale is not adequate to attract and hold men of the caliber needed without real personal sacrifice.

This is also true of other agencies serving our industry.

11. FHA needs research

FHA should be allowed to spend an adequate part of 1% of its income to keep its technical standards and guidance abreast of the times. In recent years FHA has failed to keep up with the advance in science and the progress of the industry.

(See discussion under question No. 14, page 170)

12. How to raise and lower rates

Power to vary FHA and VA interest rates should not be vested in the President or any other single political officer. A nonpolitical board should be set up to administer this power, taking into account changing conditions in the money market. The problem of regional differentials might be met by varying service charges.

This recommendation repeats in substance the recommendation made a year ago by the President's Advisory Committee on Housing Policy.

Experience since then has made it clearer than ever that discounts are not a good answer to the interest rate problem. They conceal the true cost of money from the borrower. They remove the last element of risk from the lender. They discriminate in favor of the builder with the wide profit margin who can best bury the discount cost in his price structure.

Photos: Walter Doran



Vieser: You still need the Treasury behind this guarantee.

Here are two recommendations for VA financing

13. Future housing benefits

Before the GI Bill of Rights is extended, careful consideration should be given to the housing benefits it provides, for over the years these have been expanded far beyond anything the veterans' organizations or the homebuilding industry have ever advised or recommended. Meanwhile, the veteran's economic disadvantage has disappeared, and the average World War II veteran is now making more money than the average nonveteran of the same age.

None of us would wish to take any real benefit away from the veteran, but there is a question as to whether a man who cannot afford even a token cash payment is better or worse off if he is allowed to assume the obligations of a \$15,000 mortgage. There is a question as to whether he benefits by a law which makes it so easy for him to buy, for the same

law makes him in turn easier to sell, and some of us believe that this easy selling inflates the price he has to pay.

Most of us believe the veteran would be better off if his benefits were limited to free mortgage insurance and a slightly smaller down payment than a nonveteran would have to pay for the same property. Under the present law the more expensive the house the bigger the advantage the veteran is entitled to on the down payment—5% on a \$9,000 house, 10% on a \$12,000 house, 13% on a \$15,000 house.

The no-down-payment VA loan is potentially the most inflationary force in housing.

14. VA and FHA appraisals

Our industry has often urged that the independent appraisal and inspection operations of the VA loan guarantee division should be abolished and that VA should accept FHA

appraisals and inspections, thereby relieving the taxpayer of the cost of duplicated service and relieving the homebuilding industry of all the details, difficulties and costs entailed in dual processing.

This repeated recommendation has never been accepted, partly because of objections from the veterans' organizations and partly because of the objections raised by lenders who do not wish to use FHA facilities.

Instead of recommending that the VA appraisal and inspection service be discontinued, we now recommend only that Congress authorize VA to accept FHA appraisals and inspections where this would be agreeable to both the builder and the lender.

With both the FHA and VA offices overburdened as they are at this time, it is more important than ever to end the wasteful duplication of processing.

What to do about conventional loans

15. Allow 80% conventional loans

On soundly amortized loans on individual homes, all but one of us believe that all lenders should be permitted to carry their own risk up to 80% except in states whose foreclosure laws are such that the property would be subject to vandalism or undue depreciation before it could be repossessed. Some of us even feel that under the prudent man rule lenders should be allowed to go higher than 80%.

16. Modernize foreclosure laws

Every state should stop protecting delinquent urban and suburban mortgagors with foreclosure laws originally designed to protect farmers against losing their land on the failure of a single crop. Foreclosure laws on non-farm property should permit prompt foreclosure along the lines recommended in 1940 by the commission on uniform state legislation of the American Bar Association.

17. Insure only the risk portion

If the Home Loan Bank Board wishes to do so, most of us believe it should be given every encouragement to set up the machinery for insuring the mortgage gap between the 80% limit set by state law and the 90% or 95% most builders find necessary for volume selling. To that end the Home Loan Banks should be authorized to use some of their reserves as initial capital, just as it was proposed a year ago that they use some of their reserves to provide the initial capital for a privately-owned FNMA.

(For discussion see questions Nos. 8, 9, 10, pages 166, 168)



Held: *We don't operate on a national basis conventionally.*

What to do about rental housing

18. End state rent control

State rent control should be discontinued wherever it is still in force. The tremendous building boom since 1945 has ended the housing shortage except in a few cities where the lag in apartment construction may leave some reason for continuing rent control as a strictly local measure. Even these cities will find that ending rent control is important if they want to encourage new apartment building to ease their rental housing shortage.

(For discussion see question No. 12, page 169)

19. The danger in freezing rents

In drafting any future scheme for rent control in a national emergency, clear provision should be made for allowing rents some latitude to move with the rest of the price level, so that the value of the landlord's equity can keep up with any change in the value of the dollar. It should aim at rent control, not a rent freeze. Otherwise the threat of rent control will discourage badly-needed investment in new apartments, as it has for a decade.

The justification given for making rents the first price subjected to control is that otherwise rents would probably go up faster than other prices; but as rent control has actually been applied rents were forced to go up slower than other prices.

There is no more justice in holding down rents to let people buy better food than in holding down the price of food to let people live in better homes.

20. Discriminatory taxes

Congress should stop excluding professional builders from investment in rental housing by tax laws which make them pay ordinary income taxes on projects on which others would pay only capital gains.

We believe these taxes are discriminatory; we are certain they are unwise, because: urban renewal is one of the most pressing social and economic problems facing this country, involving millions of lives and many billions of dollars. It requires the construction of millions of new rental units and the reconstruction of millions of substandard present homes.

Urban renewal will not succeed as long as experienced professional builders are taxed out of the field as they are today.

(For discussion see question No. 13, page 170)

Also

21. On public housing

Most of us believe our industry should stop antagonizing public opinion by making an issue of as small a volume of public housing as the President has recommended.

Meanwhile, here is what our industry is doing to end any need for more public housing: by building 500,000 more good new homes this year than America needs to keep pace with population growth, we are enabling millions of families to play musical chairs and each move to a better home. The continuation of this upgrading will ultimately make it possible for many, many thousands of families to move out of the slums and make it possible to demolish many thousands of substandard units.

(For discussion see question No. 15, page 172)

22. Better market statistics

The government should begin providing housing with the accurate market statistics that are so essential to every industry—the statistics government makes available as a matter of ordinary routine for almost every industry except ours. All agriculture creates less wealth than building and creates less employment. Why then should the federal government budget \$11,500,000 for agricultural statistics and balk at spending more than \$400,000 to make its construction figures adequate to our needs?



Patrick: *Cost is certainly not value.*

Here are some of the questions the Round Table asked itself:

Why do most Senators, most newspaper editors and most plain citizens think homebuilding is a subsidized industry like farming and shipping? Do we want to be a subsidized industry? Are we accepting more help from government than we really need? Are we willing to pay the price in political interference and direction that government always exacts for its favors?

What can be done to assure confidence and self-confidence in FHA, about whose future some of us are deeply troubled and alarmed? Why did FHA find itself so nearly friendless when it most needed friends? Why did hardly a voice in Congress, hardly an editorial in the press, speak up on behalf of an agency which has contributed so much to housing progress?

Why do only the savings and loan associations make use of the Home Loan Bank system? Has FHA failed to meet the needs of the small builders and the local institutions on which small builders so largely depend? Could FHA do more to meet the needs of the small towns?

Is there perhaps some way to make the Home Loan Bank more broadly used and useful? Is there perhaps some way to make mortgage insurance serve all lenders, all borrowers, all builders equally well and so command the united support the present FHA has failed to win?

Does FHA offer the one best type of mortgage insurance? Should other kinds of mortgage insurance be made available, perhaps through some other agency?

Here are the Round Table's answers to some of these questions:

Question No. 1

Just exactly why does a thriving industry like ours need any help at all from the federal government?

Answer:

Only to bypass three governmental obstacles to low-cost, high-percentage mortgages.

1. To ease the flow of mortgage money across state lines from the older states where capital accumulates to the younger states where so many new homes are needed, from the big metropolitan centers to distant villages.

2. To short-circuit backward state laws forbidding high-percentage loans or making mortgage foreclosure far too slow and costly.

3. To cover the risk that can be insured only by the government which controls the nation's money and credit—the risk of a collapse like 1932. No private agency can insure this risk without charging a prohibitive premium, for it involves insurance against what the government itself may do or fail to do, and so the government has had to add its guarantee to the otherwise self-sustaining insurance of bank deposits, savings and loan shares and FHA mortgages.

All our thinking about the partnership of business and government in homebuilding should begin by recognizing clearly that for these three needs—and only these three—we cannot get along without federal help.

All these needs arise from the constitution of our government or the past or possible future actions of government—state or national.

The first two of these needs could be eased by reform in the state laws. But the third need will always be with us.

Photos: Walter Daran



Moses: *What about the people who want homes? Won't they exert pressure to have things go on just about the way they are now?*



Andrus: *When you combine low down payments with long-term you really open up the barn and get a draft.*

Question No. 2 Why are high-percentage first mortgages so essential?

Answer: Because few families can make big down payments and second mortgages proved far too expensive.



Marcus: Eventually FHA should be taken over and owned by private enterprise.

All American industry has found that volume selling and mass production on the scale essential to full utilization of our wonderful production power can be sustained only by setting up credit facilities to let people buy on easy terms with relatively small down payments.

The lack of adequate facilities for buying homes on the installment plan was perhaps the biggest single reason why homebuilding was such a backward industry 25 years ago when FORTUNE described homebuilding as "the industry capitalism forgot, a disgrace

to our free enterprise economy." In those days financing sometimes added 20% to the total cost of a house.

The development of better facilities for buying homes on the installment plan through FHA and VA since 1934 has had two direct consequences:

1. It has enabled homebuilding to enter the industrial revolution;
2. It has enabled millions of families to own their own homes instead of renting.

Question No. 3 Is homebuilding a subsidized industry?

Answer: No.



Hughes: It was concluded that the no-no down was wrong.

Our industry pays well over \$2 billion a year in taxes (if the Tax Foundation is right in estimating taxes take one-fifth of our gross), but this year the federal government is spending hardly 1/6 of 1% of that amount for direct help to our industry.

The government has never sought to make homebuilding more profitable as it has sought to make farming more profitable. The government has been concerned only with helping people have better homes at prices they can afford to pay.

Not a penny of the taxpayers' money goes into FHA, FSLIC, or the Home Loan Bank system. FHA and the Home Loan Banks

have repaid their original advance from the Treasury in full and FSLIC is paying off the last of its government capital at the rate of nearly \$10 million a year.

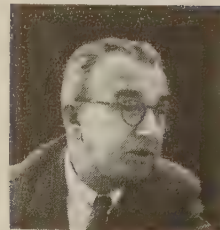
Except for the money it spends for administration and otherwise to help veterans buy homes under the GI Bill of Rights and the money it spends to help low-income families rent new apartments in public housing, the government's total budget for housing costs the taxpayers less than \$3 million.

Compare that with the \$4,176,000,000 in the President's 1956 budget to support farm prices.

Question No. 4 Why then do so many people in government and out think homebuilding is a subsidized industry?

Answer: Mostly for these three reasons:

Photos: Walter Doran



Bliss: We have the camel's nose under the tent.

1. Our industry has been the indirect beneficiary of the government guarantees offered to help veterans buy good homes with little or no down payment.

2. The government has used (and sometimes misused) the FHA mortgage insurance mechanism as a substitute for the government guarantees that would otherwise be necessary to get private investors to tackle certain emergency programs in which private capital would otherwise be unwilling to invest. For example, the government used FHA insurance to get defense housing built in 1951 without an adequate assurance of permanent need from the Defense Department, and the government used FHA insurance under Title 608 to get new rental housing built for returning veterans in 1948 to compete with rent-controlled apartments built at prewar costs.

No one would deny there was an element of subsidy in these programs, but it was not a subsidy for our industry.

3. At times we have asked government to take more of the risk than was necessary or to interfere for our benefit with the normal working of the money market.

Except for the ill-starred effort to peg the interest rate during 1951 and 1952, none of these interferences has added up to many dollars.

Most of us believe our industry would be in a better position today if we had not compromised our stand against subsidies by asking and accepting these relatively small favors.

Question No. 5 What is the one and only proper function of FHA insurance?

Answer: To spread the risk on sound mortgages and so make high-percentage loans cheaper, and easier to get.



Wellman: *You can't mix welfare housing programs with insurance funds.*

FHA's mortgage insurance business should be divorced from all the other activities for which the government—beginning under the Democrats but now more than ever under the Republicans—has tried to use the FHA machinery.

If the loan is really sound FHA can then afford to take the risks involved in demonstrating its soundness, as it already has on so many new types and titles, including most specifically Title I repair loans.

Most of FHA's recent troubles stem from the government's repeated and growing insistence on using FHA to insure mortgages on projects whose social purpose is commendable but whose safety is questionable. Making FHA insure bad risks at nominal rates serves no other purpose than to conceal from the taxpayers a vast contingent subsidy—a subsidy on which the taxpayers had every right to be informed.

These programs for which the government has used FHA to provide concealed or con-

tingent subsidies add up to less than 10% of FHA's mortgage insurance business, but they account for nearly 90% of the criticism of FHA and the misunderstanding of FHA. We wish they could be handled through some other agency, for they are incompatible with the market thinking that should dominate the businesslike conduct of FHA's ordinary mortgage insurance business.

On these quasi-subsidized programs we believe the government is entitled to exert more control than on ordinary loans. For example, we believe Section 608 should have been set up with better safeguards against mortgaging out, but some of us question whether the government is even entitled to know the costs behind the values FHA insures under Section 203, for cost does not necessarily have much to do with value.

Until the subsidy and nonsubsidy programs are clearly separated it will be almost impossible to set up sharply divergent rules to govern the two types of loan insurance.

Question No. 6 Why do so many people misunderstand the function of FHA?

Answer: Largely because its name gives such a wrong impression.



Coleman: *A government corporation has many advantages over an administration.*

Back in 1934 the first idea was to give the agency a name like the Federal Mortgage Insurance Corporation, clearly indicating that its operation would parallel that of the Federal Deposit Insurance Corporation. The administration was hoping then to use the Home Loan Bank Board to perform the overall housing policy function now carried on by HHFA, but the objection of its chairman made it seem necessary to find some other agency that might better serve the purpose. Someone suggested the embryo mortgage insurance corporation, and so it was given a

new name broad enough to cover any purpose for which it might later be used.

What wonder then that everybody is confused! What wonder that gullible home owners thought their Title I insurance carried some implication that federal authority approved and stood behind the soft-shoe boys who fleeced them.

This confusion should be cleared up at once by giving FHA the more appropriate and descriptive name originally planned for it—the Federal Mortgage Insurance Corporation.

Question No. 7 Does FHA now offer the one and only best type of mortgage insurance?

Answer: There is no reason to think so.

Is there any good reason FHA should not be allowed to offer several different types of mortgage insurance to meet the needs of different types of borrowers and lenders? If not FHA, is there any reason why some other agency should not be authorized to offer mortgage insurance on a somewhat different basis than FHA has offered up to now?

The $\frac{1}{2}$ of 1% a year FHA insurance rate was pulled out of the air 21 years ago and has been applied arbitrarily to all FHA

mortgages as if the risk under all titles and on all percentages was the same. This is a patent fiction.

The FHA insurance premium may even be high. It is substantially higher than mortgage insurance rates in Canada, and on a 30-year maturity it adds up to several times as much as privately-owned insurance companies charge in England for policies that meet the need almost equally well.

Round Table Question No. 7 cont. on p. 166



"We do everything we can for the builder except build his houses," says Sawyer

This lumber dealer develops

"More and more lumber dealers have turned land developers to help their small builders find a place to build and use their materials." So says H. R. "Cotton" Northup, executive vice president of NRLDA.

"Metropolitan areas like Washington, Kansas City, Dallas and Cleveland have seen fewer lumber dealers developing land than have smaller cities. Today maybe 400 of the 25,000 retail lumber dealers are developing land. Yet it is one of the finest services a lumber dealer can offer his builder customers—if he can afford it."

Here is perhaps the No. 1 example of a small-city lumber dealer developing land for his builder customers.

W. H. "Bill" Sawyer of Worcester, Mass. bought 367 acres in 14 different locations in the last few years and developed 126 acres on which 28 different builders built 231 houses.

"In these days of high development costs, the small-volume builder needs a lift so he can use his working capital to build houses," says Sawyer.

In conservative New England where small builders thrive ("Perhaps it is the New England nature to want more individuality in houses") the supply of developed land is almost nil. Many of Sawyer's small builder customers (average: five to six houses a year) cannot afford to develop each of the lots on which they build. Sawyer uses his greater capital to do it for them. And he cuts red tape getting land processed through planning commissions, FHA.

Sawyer considers land purchase or development as much a part of his company's investment capital as plant and equipment (company is owned by stockholders). He says frankly that his whole purpose in developing land is to create a place on which a builder can build—using his materials. He will sell land to any builder and sell it on any basis the builder selects—outright before he starts to build, as part of the construction loan on a house (Sawyer has a flexible, informal construction loan program), or by taking back a mortgage as part of the purchase price being paid for the balance on a lot-release basis.

J. H. Lamson, Sawyer's vice president, says: "We prefer to sell outright for cash: the more equity a builder has in his land, the less we have to furnish working capital and the farther we can stretch our own working capital to buy and develop more land."

Not all Sawyer's builder customers make use of either his land or construction loan facilities: "Some of our best customers buy and develop their own land. When they're big enough, they can afford to."

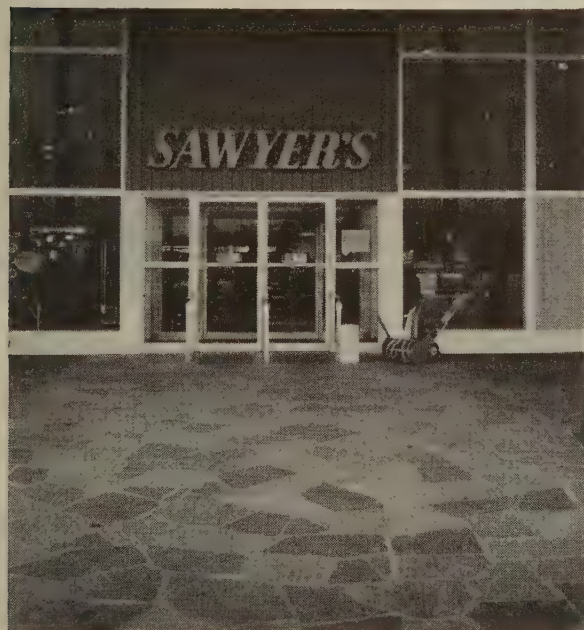
Other products and services Sawyer provides range from manufacturing trusses and assembling windows for stock openings to extending advice on plans, sales, merchandising, subcontractor costs, government regulations ("Help with FHA and VA forms is a big help to the little fellow"). Recently Sawyer retained local Architect Forrest Jones to design a series of houses using Lu-Re-Co panels.



Land development tops the two dozen services Sawyer performs for small-volume builders

raw acreage for small-volume builders

Showcase for building materials and consumer products is the "Sawyer Home Shopping Center," (below) designed by New York Architects Ketchum, Gina & Sharp. Although Sawyer believes all enlightened lumber dealers are becoming keen merchandisers, he deliberately separated his yard and warehouse (right) from his retail showroom to expedite builder business. Keeping the handyman out from under the feet of the builder in the lumberyard, he believes, is as important as the trend to provide an attractive store for the handyman. "The builder is still our biggest and best customer."



"We go to the builder; he doesn't come to us,"

says Lumber Merchant Sawyer who develops new builders

all the time, keeps their business by employing 14 salesmen

to fill all their needs. His customers range in size

from Philip Ham who built his first three houses last year

to Eric Widing and John Spencer who build as many as 20

in two different towns and range in experience

from ex-machinists, ex-remodelers, ex-advertising men to

old timers like Frederick Pearson

with 40 years building experience. See next pages.

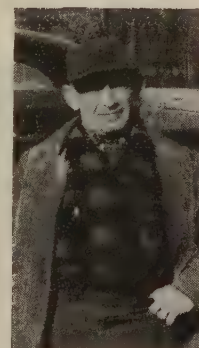
Milton A. Thompson, a national director of NAHB and past president of the local chapter, builds up to eight \$30,000 to \$40,000 houses on speculation each year on a tract he has been developing since 1945. At first he built colonials (see two-story house, right) with a good sense of scale; now he is trying to master the ranch house. He is his own designer, thinks he owes most of his sales success to the fact that he landscapes each lot before offering the house for sale completely furnished. Thompson sells all houses conventionally since his higher-priced houses attract buyers with higher incomes. He is seen (top) in pine-paneled home office.



M. A. Martell & Son (house, above) switched to development housing in \$12,000 to \$16,000 bracket after starting as contract builders in '50. Father-and-son team builds about ten houses a year, sells all conventionally ("We're more familiar with it, less government red tape"). The Martells buy land from Sawyer, have built more low-slung ranches than any other type house but are now building several hillside houses with garages in basements. Constant goal: to offer most house at lowest cost. Since son had design training, firm does not use architect. Their houses show uncluttered front elevations; most window heads align.

Look what different

Edgar J. Bonnette, a builder for 20 years, used to be a remodeler. He now builds ten houses a year in the \$17,000 range, works along with own crew: "We do a lot of customizing and cabinet-work right in the house" (below). He sells FHA since lumber dealer started to help with paperwork, uses a realtor but not an architect: "The best plans evolve. Each new house I build reflects what people liked best in the last."



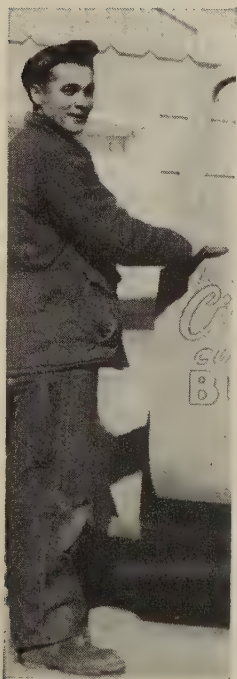


Paul Perreault, building as Hillcrest Homes, erects seven to 15 houses a year in \$14,000 to \$40,000 bracket, builds both speculatively and on contract. His architect: Harry Morton Ramsey. Perreault ascribes his use of an architect to the fact that he has done architect-designed contract houses for 20 years. He sells conventionally, builds on land Sawyer sold him. Perreault believes Sawyer can best help small builders by extending credit but finds land development a close second. Example: "When I couldn't afford to buy a complete estate, Sawyer helped me out by buying part of it." Perreault finds basementless houses won't sell speculatively around Worcester: "We just can't seem to get the old Yankees up here to change their minds although I know builders sell slab houses successfully in Connecticut." Two other buyer musts: "Hot-water heating systems, nationally advertised products."



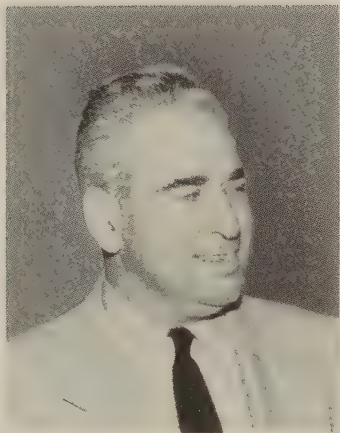
builders a lumber dealer serves!

Matthew G. Ciociolo, a machinist five years ago, got his start through Lumber Dealer Sawyer, now builds 15 houses a year (\$14,000 to \$17,000) on land developed by Sawyer and paid for after houses are sold. Ciociolo does no contract work, builds only for sale, uses a realtor but not an architect. "Land development," says he tersely, "is a big help."



Clare E. Fairchild, now a 12- to 14-houses-a-year builder was in advertising nine years ago. Extremely progressive "We don't put shutters on, owners do"), Fairchild uses an architect, Jack Hulslander, but is a talented designer himself. His price range: \$14,000 to \$40,000. He won't build any more modern houses except on contract, now subs all labor: "It's faster, makes more money for everyone, cuts my payroll to two men."

Don Sherman, previously in the office and apartment maintenance field, gradually worked into remodeling, then building. He built his first four houses last year, most in higher-priced (up to \$40,000) bracket on contract, sells conventionally. Training in interior decoration helps him design and choose colors for his houses. He does not use an architect.



L. Kenney

This article is a reminder to all builders, large or small, that to be successful they must keep their minds open.

The 16 ideas presented on these pages are the kind which aid immeasurably in building more value into a home. In a competitive market it is essential that the builder keep on his toes. This article, with its thought-provoking ideas, should encourage all who read it not only to utilize some of the ideas but also to seek out and develop ideas of their own.

I heartily recommend it to all builder readers.

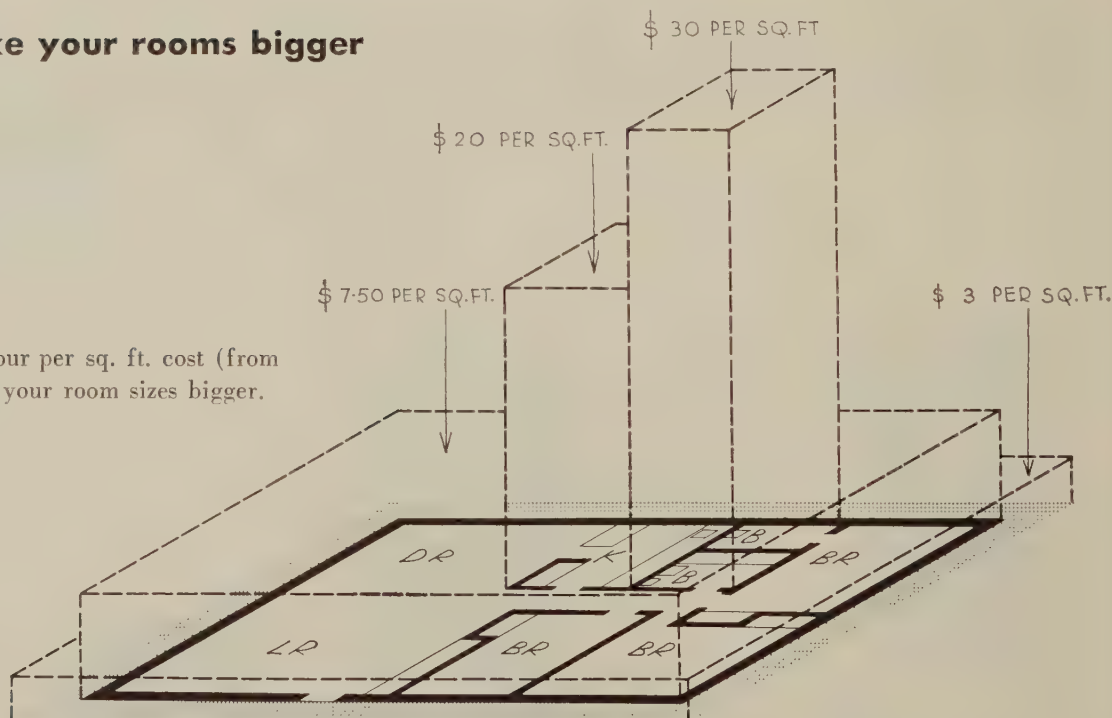
—Earl W. Smith, president of NAHB

16 WAYS TO BUILD

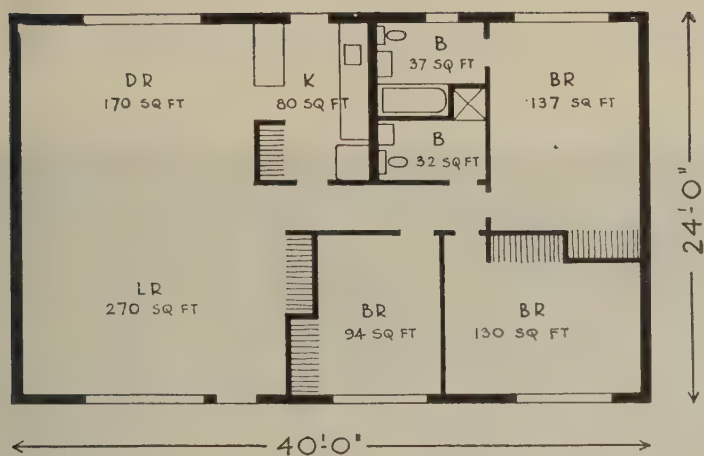
**This is the first of a series of cost-cutting articles
to appear each month in HOUSE & HOME**

1 Make your rooms bigger

One good way to lower your per sq. ft. cost (from \$10 to \$8.30) is to make your room sizes bigger.



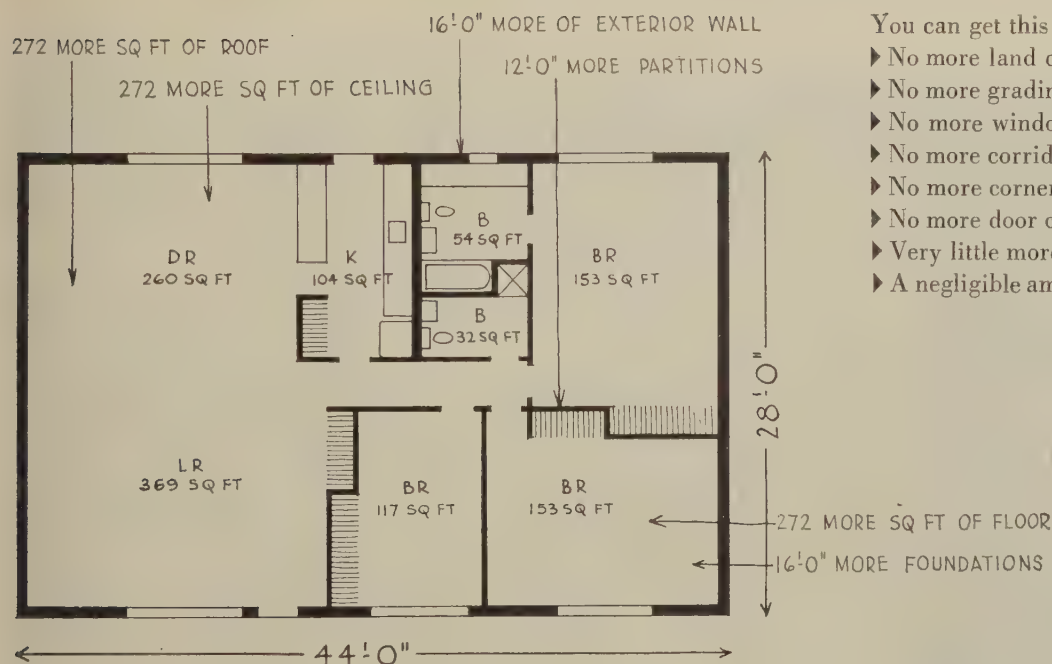
Every builder has to put \$30 per sq. ft. space in his houses (the bathrooms).
Every builder has to put \$20 per sq. ft. space in his houses (the kitchen).
And every builder has to put in \$7.50 per sq. ft. space (living-dining area, bedrooms).
But few builders put in the \$3 per sq. ft. space they can get by making rooms bigger.
Yet, the fastest selling houses in the US (see *Best seller* series, H&H, Apr. '53 and following) are those that give the most house for the least money.
In a new house, above all, people want more space.



This is a \$10 per sq. ft. house

Take this standard 24' x 40' house. It has 960 sq. ft. of floor space. If you add a 2' band all around the house, you only increase the perimeter 16' or 12%. But you increase the area 272 sq. ft. or 28%. Without moving a single partition in this house you can get bigger rooms. See below.

BETTER FOR LESS



This is an \$8.30 per sq. ft. house

You can get this much additional house at:

- ▶ No more land cost
- ▶ No more grading cost
- ▶ No more window cost
- ▶ No more corridor cost
- ▶ No more corner cost
- ▶ No more door cost
- ▶ Very little more for bathrooms
- ▶ A negligible amount for utility service

The only additional costs to you are indicated on the larger house. Any builder should be able to provide the space for no more than \$1,000. Tulsa Builder Howard C. Grubb who is adding 2' to the end of his houses says "I don't think we'll even be able to find the additional cost." Media, Pa. Builder Wallace Arters who widened his new split level 4' says: "We enlarged the house without increasing the price, simply eliminated some of the refinements like sloping ceilings, wide overhangs over the gable ends." Cupertino, Calif. Builders Stern & Price say: "Space alone is cheap. We can provide it at no more than \$3 per sq. ft."

2 Use 3-D to explain your details

"We can all learn from the prefabrication industry," says Fred Fett, Atlanta builder, who plans to use detail perspective sheets instead of conventional detail drawings on his next job.

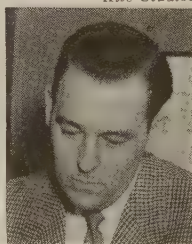
Numbered sheets, following the order of operations, are especially useful in helping workmen catch on to unfamiliar money-saving construction techniques like post and beam.

The bigger the building project, the more isometric details will pay off: Fett, who built 37 houses last year would not need as many as National Homes, which uses 62 sheets in its construction manual.

"You might spend more money for design and detail sheets," says Fett, "but you can make it up by using semiskilled workmen who don't have to keep checking with foremen to see what they do next and how they do it."

Cost of detailed sheets will vary from \$10 to \$25 each. Many of them can be used over and over again when they describe unchanged details in different models.

Kile Studios



Fred Fett

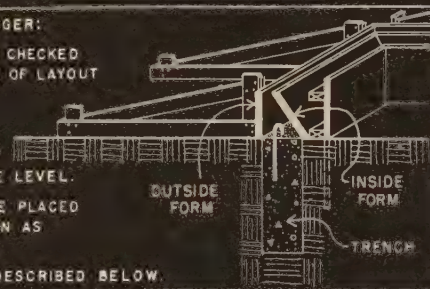
Courtesy National Homes

PLACE STAKES & OUTER FORMS AROUND PERIMETER TO GRADE SHOWN ON BENCH MARK AT BATTER BOARDS. REMEMBER—TOPS OF BATTER BOARDS AND LINES ARE SET AT FOUNDATION HEIGHT. THIS IS FOR ROUGH LEVEL ONLY. IT IS NOT GOOD ENOUGH FOR FINAL LEVELING WHICH IS DONE AFTER TRENCHES ARE COMPLETED.

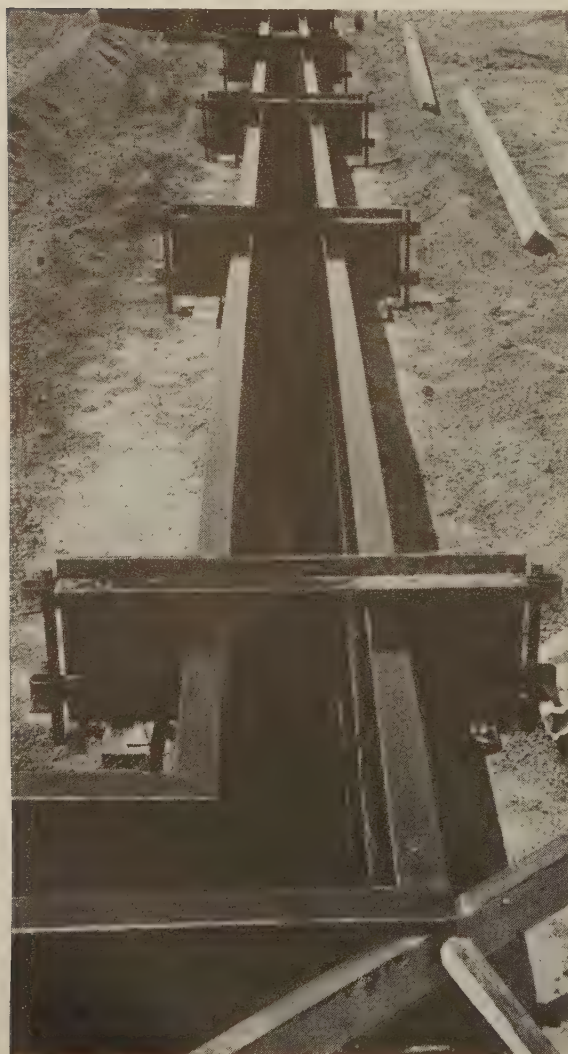


WHEN USING A MECHANICAL TRENCH DIGGER:

- THE 4 STAKES AT CORNERS ARE CHECKED FOR LENGTH OF WALLS & SQUARE OF LAYOUT BY DIAGONAL METHOD.
- FOUNDATION WALL IS DUG TO REQUIRED LENGTH & DEPTH.
- CONCRETE IS POURED TO GRADE LEVEL.
- HOKED REINFORCING RODS ARE PLACED VERTICALLY 6'-0" O.C. AS SOON AS CONCRETE HAS BEEN POURED.
- FORMS ARE THEN PLACED AS DESCRIBED BELOW.



CUT TRENCHES WITH PICK & SHOVEL SQUARE & TRUE TO DEPTH AND WIDTH REQUIRED LOCALLY.



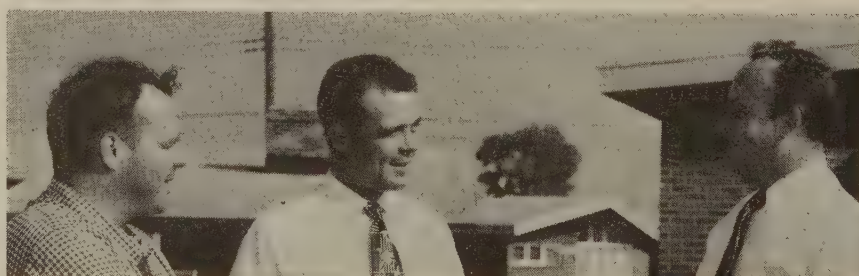
3 Use steel forms for footings

"Three times faster than wood forms with wood pegs," report Fischer and Frichtel, St. Louis builders who use prefabricated sets of steel forms.

Although the original cost of steel is 2½ times that of wood forms (about \$700 vs. \$250), each job saves Fischer and Frichtel \$45. The extra cost of the steel forms is amortized over eight houses.

Steel forms are quickly and efficiently set, require less supervision. While wood forms become unusable after a dozen jobs, steel forms last indefinitely. A bonus for the builder is the clean and accurate foundation wall faces, which require very little dressing. Oiled before use, the metal forms are quickly cleaned for the next job.

"Fast!" say Builders Ed Fischer, Bud Frichtel, and John Fischer



Piaget

4 Build with parts instead of pieces

Panels use more lumber, but the Small Homes Council says they cut wall framing labor costs 30%.

Biggest savings come from setting windows and doors in a shop. Local lumber yards are now selling panels with stock windows installed.

There is less waste because panels are carefully planned.

Speed is another economy factor. With the Lu-Re-Co system two men can easily erect the walls for a 1,000 sq. ft. house in one day.

Panels can be quickly and efficiently built because they are assembled flat on the ground, near supplies and under cover. The units repeated around the house are neat and pleasing to the eye.

Photo: Tyner & Murphy, courtesy Wadsworth, Inc.



Door comes completely assembled in exterior wall panel

Complete window-and-wall assemblies—latest in building components



Photo: Mears, courtesy Fabiricon



As panels are assembled . . .



. . . they are moved directly to sunken trailer

5 Sink your flat-bed trailer to jig platform level

Knutsen-Bowers



Todd Sloan

Builder Todd Sloan of Colorado Springs has worked out a new trick to save his men some heavy lifting. He sinks his flat-bed trailers several feet into a sloping hole next to his jig platform where framing panels are made.

Bulldozing out the hole costs next to nothing, makes it easier to slide wall panels onto a trailer and stack them there.

Using several mail order trailers, costing \$165 without bed, he leaves the loaded trailer in front of each house, saves one handling by letting the carpenters unload it as they use the panels. He says that less handling on the job plus the fact that his panels are not stored on the ground keeps them in better condition. Maximum dimension of panels is about 16'.

6 Save \$15 by using dollies in laying subfloors



Jack Turner

Men who use dollies when nailing subfloors can work from a seated position, at the same time moving easily and quickly with their work.

Builder Jack Turner of Media, Pa. speaks from practical experience when he says: "A man with rubber heels can sashay along a floor, frontwards, backwards or sideways at a great rate. We save at least \$15 per house with our dollies."

Already used by some builders to nail finish flooring, the dolly technique is also well suited to board and plywood subfloors.

Here is how the technique works: a lay-out man places five T&G boards, angle-nailing every fifth one and face-nailing a few points, repeating the procedure until an entire floor is laid. He is then followed by a carpenter's helper on a dolly who face-nails all the boards.

7 Eliminate framing over doors

Impossible? Not at all.

Here are two ways to get rid of the complicated and expensive construction that bridges the difference between door and ceiling heights.

► Let the doors run full height, from floor to ceiling. One builder found the special door size paid for itself in the first house, began saving money after that. If flush doors are 8' high they can be made without waste in local mills since plywood is also made in 8' sheets. Or . . .

► Build jambs up to the ceiling, filling "transom space" above door with a piece of flush door cut to size. Five such pieces can be cut from a standard door. This technique uses no special door sizes, often looks better than conventional construction.

Edward L. Barnes, architect; photo: Ben Schnall



Piece of flush door fills "transom space" between ceiling and door

8 Machine-nail finish flooring

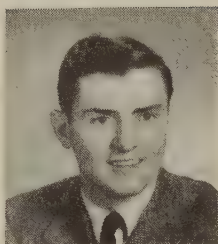
Builders who have used a nailing machine say they wouldn't be without it, claim they have cut floor laying time in half, save \$10 to \$15 per house.

Machine illustrated costs \$97.50 retail.

Two quick mallet blows drive each nail at exactly the correct angle. The flooring cannot be damaged because the hammer never hits it. Since there are no hammer marks to sand out, finishing time is cut.

The machine is especially useful for pre-finished flooring.

Brooklyn Flooring Contractor Otto Berk saves at least 10% by using the machine, finds it handiest in the "one-room" building technique. Berk feels that some of the economies are lost for small areas because of many starts at walls, and because top-nailing must still be done by hand.



Otto Berk, Jr.

Nailing machine cuts floor laying time in half



The Dicksons

9 Use a continuous header

Framing costs were reduced \$16 in a house studied by the Small Homes Council by using a continuous 2" x 6" header.

The top plate is replaced by two 2" x 6"s turned on edge, which run around the entire perimeter of the house. This member acts as a lintel over all openings, eliminates separate headers over each wall opening since the 2" x 6" top members are strong enough to span the rough stud openings of a 3'-8" window.

Since the header height is maintained around the building, fewer stud lengths are necessary and cripples are eliminated. Especially noticeable at window openings, this simplification saves in labor costs of cutting and fitting. Coupled with the use of 4' panels (studs spaced 2' o.c.) the continuous header requires only 1% more bd. ft. of lumber than conventional construction. Savings in labor more than overcome the added cost.



Photo: Univ. of Ill., Small Homes Council

10 Combine window openings

Photo: Mears, courtesy Fabricon



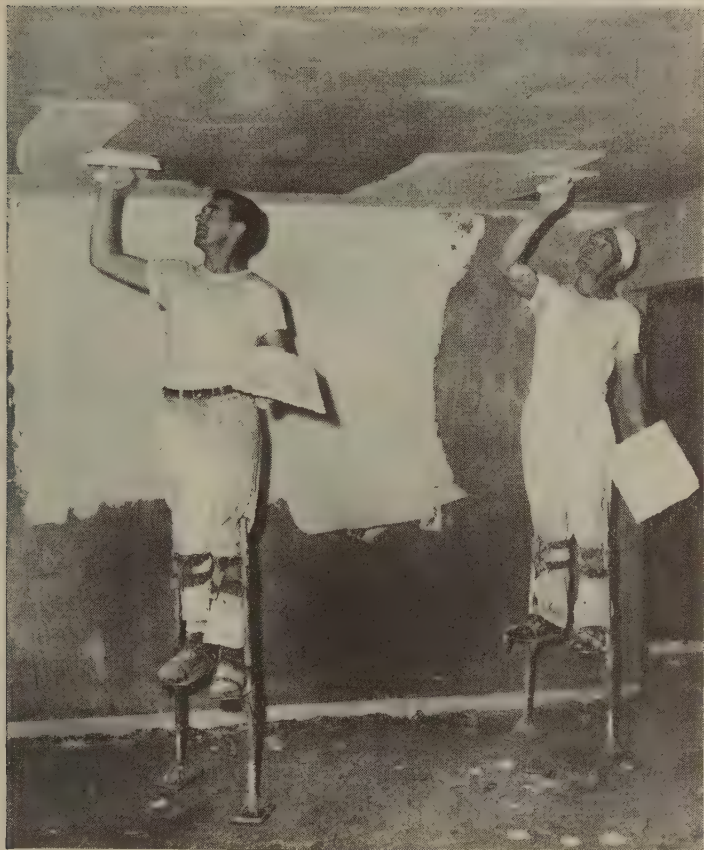
Biggest single way to cut outside wall costs is to combine window openings. Savings of \$134 were gained in one house studied by the Small Homes Council. In the study house, 20 average-size window openings were combined to make 10 larger ones, a change that many builders could easily adopt. The savings come: a) because large windows cost only about one-half (per square foot of area) as much as small ones

and b) large openings require less cutting and fitting because there are fewer pieces of framing.

Aside from these savings, a builder can cash in on another important advantage—appearance. Small windows scattered at random around the house tend to destroy its feeling of continuity, make it look smaller. Larger areas of glass have a simple elegance, make it more appealing to buyers.

Photo courtesy Skaggs Mfg. Co.

11 Make your workmen 8' tall



J. Bell



Charles Wagner

Workmen come in a wide variety of sizes but ceiling heights are usually 8'. To make their men taller, some builders are using aluminum stilts. This saves money because it eliminates setting up scaffolding and moving it as men finish. Stilts can be used to advantage in plastering, dry wall, painting and some carpentry.

Stilts weigh only 8 lbs. and are adjustable from 18" to 24" from the floor. Rubber caps on the bottoms provide safe footing and make the stilts so stable that workmen can use them without practice.

Lumberman Charles Wagner, president of Burnet-Binford Lumber Co. of Indianapolis, suggests the only problem is to overcome workmen thinking the idea is a foolish stunt. But men soon learn that stilts save them more time and trouble than using low scaffolding.

12 Save up to 50% of labor costs with plaster machine

When a four-man crew can wet plaster up to five two-bedroom houses a day it is news. That is a standard accomplishment with pneumatic machines. Although expensive (about \$2,500 for a permanent lease), the machine saves some builders as much as half of their labor costs because men work faster, use no scaffolds.

Another advantage is that plaster is applied with such force that it is stronger.

Builders Don Hunt and Ernest Giese of Inglewood, Calif. built 50 houses, used plastering machines on all. They were delighted with the speed, said they saved about 25¢ a yard on their plaster subcontract. Resistance of mechanics to this technique is diminishing. Reason: dry wall is underselling wet plaster in many areas. By cutting costs wet plasterers hope to stay in business.

Most machines in the market require use of union labor, lightweight aggregate.

Photo: Glenn B. Ward, courtesy E-Z-ON Corp.

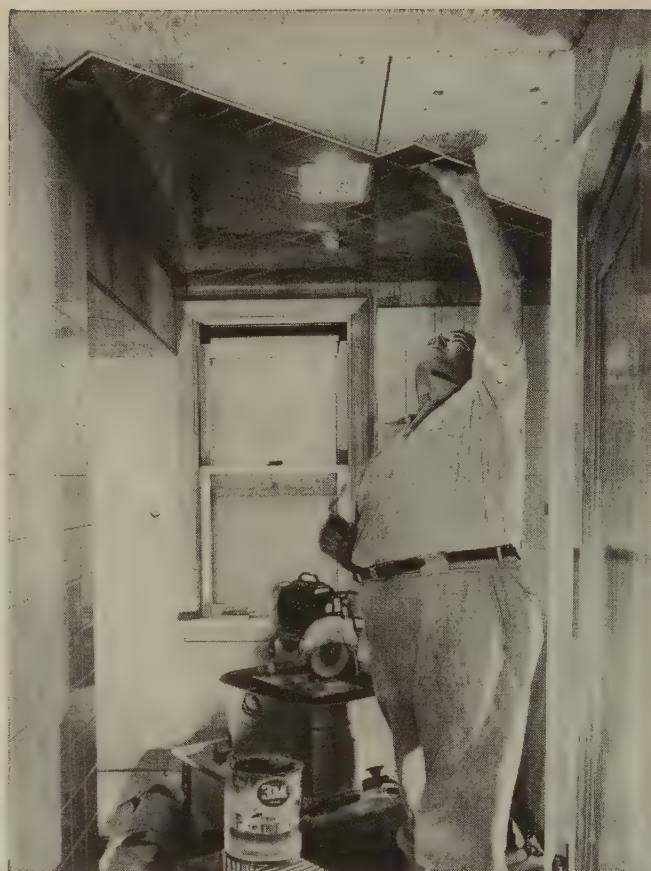


13 Set your tile in adhesives

"Saves us 20% on tile work," report many builders because:

- Tile is quickly set with no delay for mortar bed to set. Complete tile job for a house is done in one day.
- Material costs are about \$2 30 less per house because adhesive replaces sand, cement, lime.
- The services of a tile setter's helper are not required.

Stackler & Frank, Long Island builders, report a further saving is in the fewer repairs required. Tile set in adhesives rarely falls out. One of adhesives' major advantages; it is waterproof. Cleanup time is cut to a minimum. Important for builders in a cold climate, heat is not necessary during the curing period.



14 Build in the roof gutter

Duggan & Duggan, Huntington, N. Y. builders find a built-in plastic gutter (below) "the answer for the modern house." It costs 25% less than older wood and metal gutter.



Courtesy, Hide-A-Drain Co.

Built-in roof gutters allow an uncluttered sweep of fascia (or no fascia at all) to sweep across the edge of a roof (below).

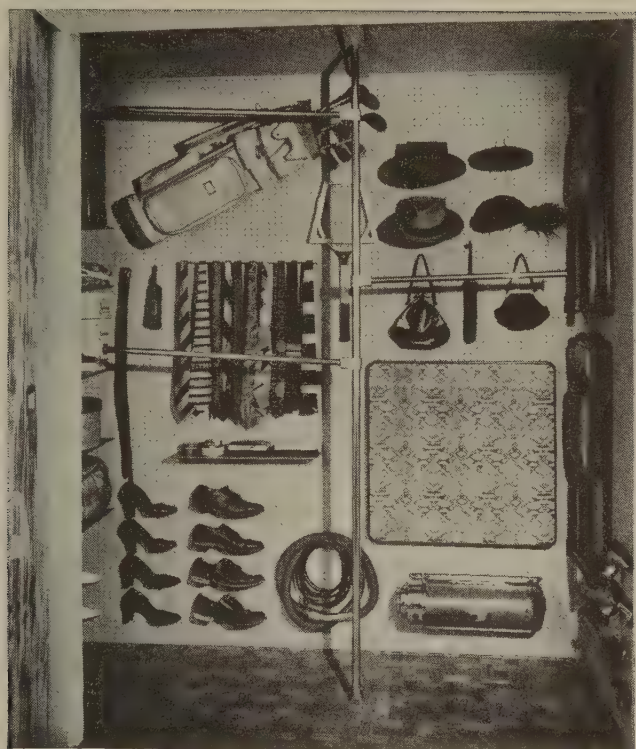
They also solve the problem of unsightly paint peeling on exposed gutters, says St. Louis Builder Burt Duenke "and cost less."

One built-in gutter (left, below) needs no painting and is practically invisible (colored roof particles embedded in plastic match the roof shingles). It saves builders as much as \$20 per house because it requires no fascia board, covers untrimmed rafters and roof sheathing. One builder uses it to straighten out wavy eave lines. Because the gutter provides a firm edge, a ladder can be placed against it without damaging the gutter when making repairs.

Ralph Fournier, architect



15 Line closets with perforated board



Beacon

Lots of holes can make sense because they make the closet more useful. Valuable peripheral space is put to full use for storing everything from vacuum cleaners to card tables. When shown in model houses, the perforated board has proved immensely popular.

Many practical pieces of hardware (including clothes rods, shoe racks and various hooks) are made to fit this pressed board. Applied directly to the studs inside a closet, it compares favorably with dry-wall application costs, can easily be painted or left unfinished.

Builders could supply a few pieces of the special hardware as eye-catchers for prospective buyers, allowing the housewife to make any arrangement she wishes after moving in.

16 Use a mobile power-tool shop

"We cut labor costs as much as 25% using a portable powershop," says Denver Builder Vernon Estes.

His method: mount a radial saw, jointer, hand power tools like saws and router-planers on a trailer, rolling it to the building site behind a pickup truck. The power-tool shop, Estes says, is even superior to portable power tools carried on the back of a pickup truck. His trailer is wired for a single electrical hook-up.

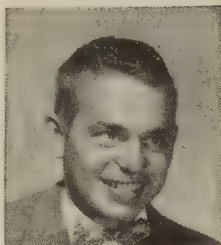
Estes found he amortized the cost of his power trailer within nine months of the time he bought it.

Other power tool set-ups on the market include:

- A radial arm saw that can be dismantled from its own trailer and moved indoors.
- A portable radial saw that can be unloaded from a truck.

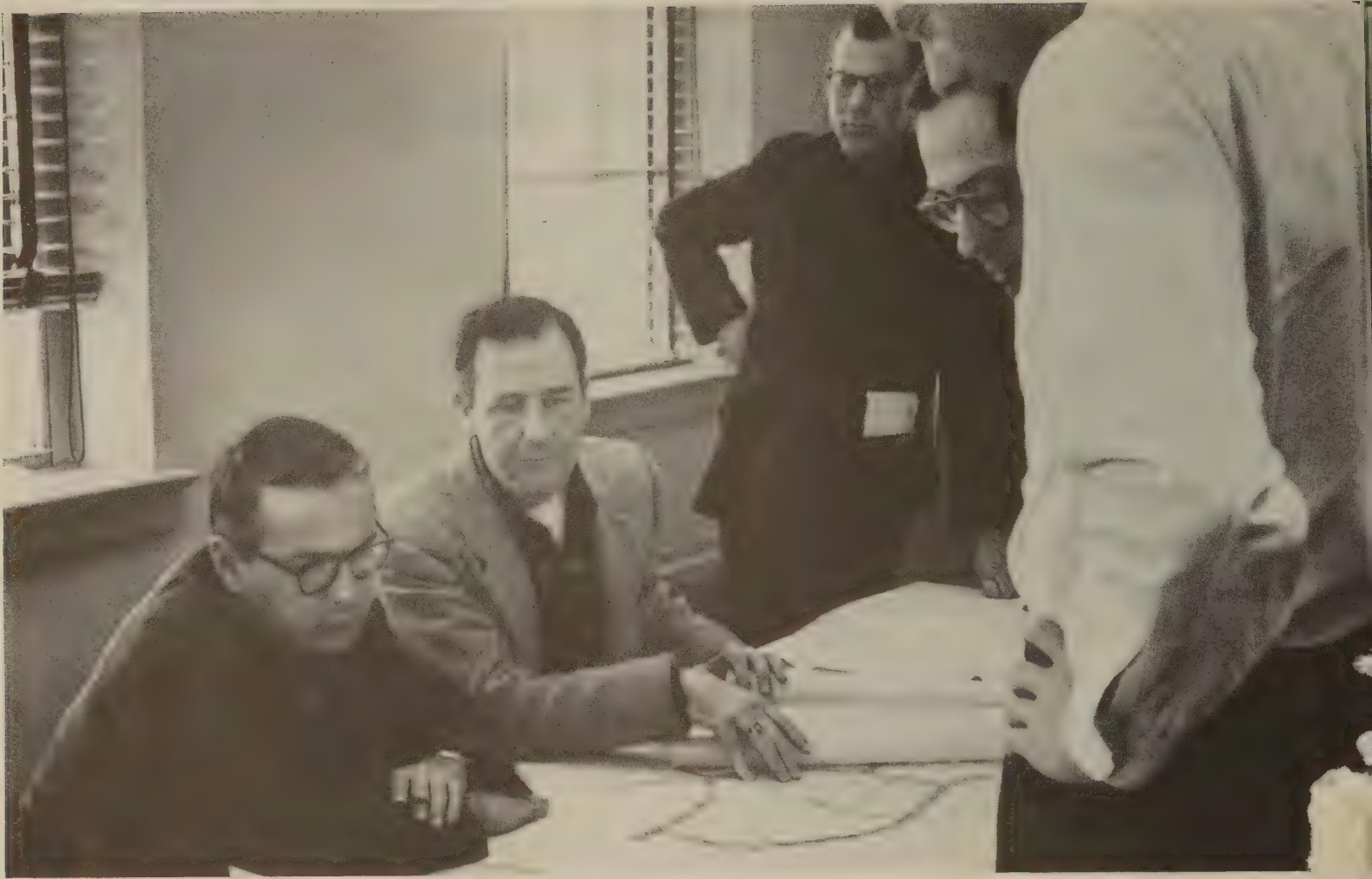
Both require two men to move them.

In outlying areas where electrical current is not provided during building, most builders will find a portable generator (one man can carry it) necessary.



Vernon Estes





Pondering (l. to r.) Architect George Hay, Builder Jack Turner, Realtor Dave Pomeroy, County Planners Michael Cabot, M. Todd Cooke

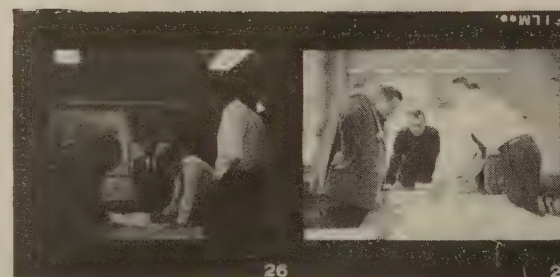
When FHA officials and planning commissions finish pouring over a builder's new subdivision plans, the builder frequently ends up with a park—and a problem: how to dispose of it.

The builder-realtor team of Seal & Turner and Dave Pomeroy learned:

How to turn a park problem



Architect, builder
realtor, engineer
and planning commission
voicing their opinions
on the park problem



are here captured by a HOUSE & HOME photographer
when they met one day last month
to talk over a new subdivision and a new park.



Says Community Builder Jack Turner, Media, Pa.:

"I'm in favor of parks.

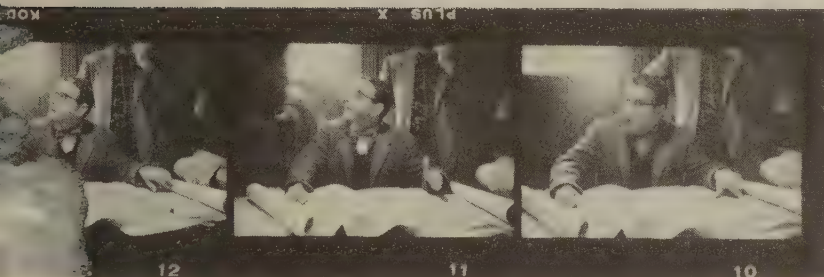
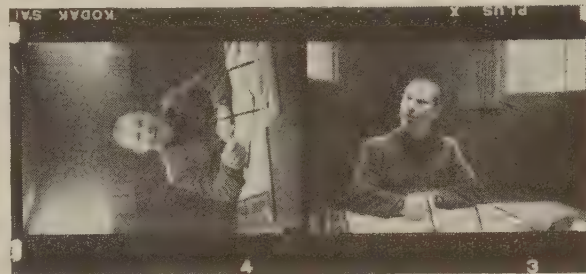
But the whole problem of parks today is monetary: who is going to pay to maintain and police them?

It's the community's problem, not the builders'.

Small suburban towns and county park boards can't afford to take over parks scattered all over a community, but the builder is continually pressured by FHA and planning commissions to put parks in *his* projects."

Says Realtor Dave Pomeroy:

"A realtor builds up the sales appeal of a park when he's selling houses, but he has to live with the complaints that follow: complaints about smooching parties at night. Or somebody taking his shirt off and opening a box lunch within sight of a home owner's front window. I don't know if people who buy \$25,000 to \$40,000 houses on one-acre sites will sit still for a big park in their backyards."



Says Landscape Architect George Hay:

"I think the county park board is dead on its feet.

They should be working out a master plan for greenbelt parks around big residential areas

like the one in Westchester County, New York.

As suburbs get more urban, people look for parks.

The long-term plan

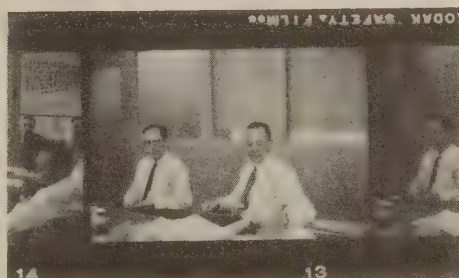
is more important

than the individual builder's job."

Says M. Todd Cooke, executive director, Delaware County Planning Commission:

"Small subdivisions each with a different owner are inclined to set up bad or haphazard park patterns.

We've got to organize these small subdivisions into a larger community or regional pattern."



into a sales asset



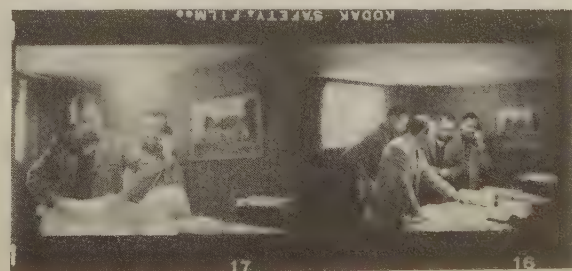
Says Engineer Jack Houtman:

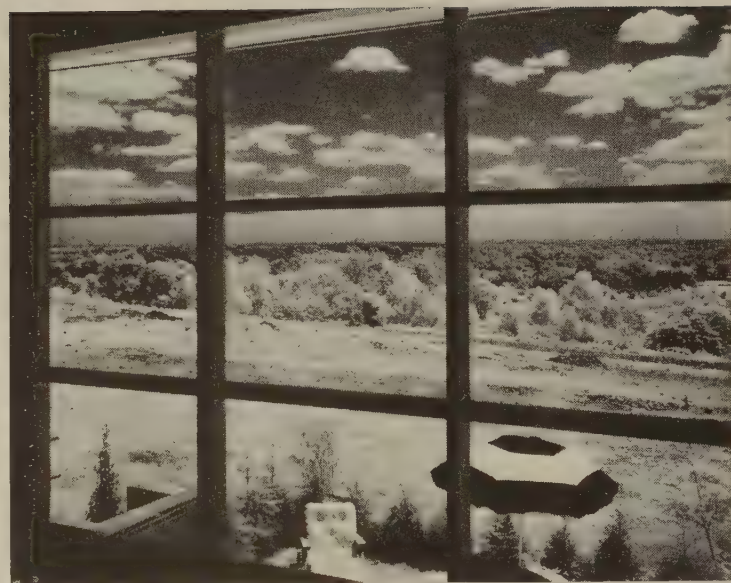
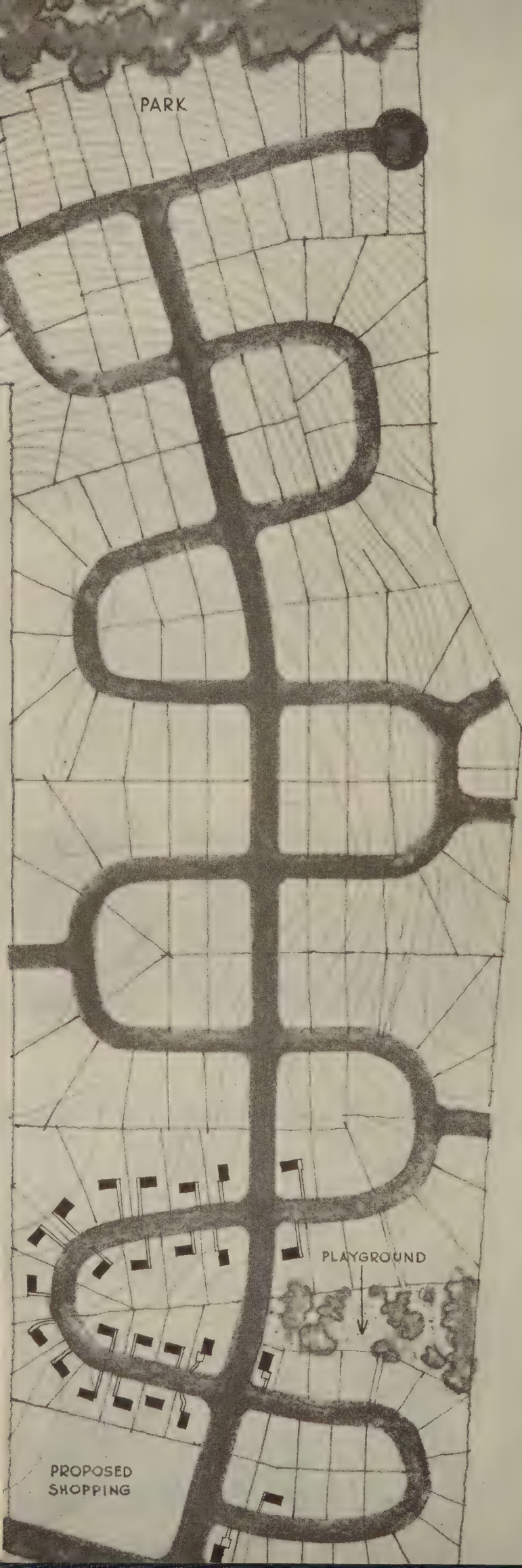
"When a builder is developing quarter-acre plots, parks make sense.

I wonder if they make any sense at all around full-acre sites.

Creek valleys in the Delaware County area are naturals for major recreational areas."

Turn the page for the solution to the park problem that builders Seal & Turner used in their prize-winning subdivision, High Meadow—the same solution they will apply to their latest subdivision.





Picture windows with big pictures in them: panoramic sight of neighborhood park spreads itself outside upper and lower story window walls (above and below) in Seal & Turner's prize-winning High Meadow development. Note how Landscape Architect George Hay solved problem posed by a long, narrow site on ridge of hill (see plan). He planned all driveways to face curved collector streets snaking through narrow site to overcome problem of backing out of driveways onto faster center-laned main artery in center. The 80' right-of-way at entry to development was imposed by county planning commission. "Smaller park-playground area (lower right on site plan) will always relate to neighborhood," says Hay. "Eventually the county park board may take over the bigger park area in the rear of the site" (top of site plan). Water company liked idea of continuous pipeline following curve of streets because many dead-ended water mains would have raised a low-pressure problem for home owners.

Solution: help organize a neighborhood



Photos: Lawrence S. Williams



association to take over the park

Callbacks and complaints are one major builder headache. Disposing of a park is another. This builder-realtor team put them both together, came up with one cure.

They helped organize a neighborhood association. Other builders told them that was like cornering a bear: "Civic associations are organized by home owners to harass the builder." But Seal & Turner and Dave Pomeroy reasoned differently: "Good customer relations is good merchandising; over 25% of all houses are sold by word of mouth of satisfied customers. Why not organize an association to channel customer wishes and complaints through and deed the park to the organization?" Their idea worked.

Here are the ground rules they recommend:

Get the early buyers (20 to 25 will do) to start the organization.

Co-operate with them in getting from 90% to 100% turnout for the first meeting.

Set up a first night program. Example: get a nurseryman to talk about landscaping, work up a cut-rate plant sale for members.

Serve refreshments and get to know your buyers even better.

Donate a sign for the park: "High Meadow Park." Credit the

builder: "Seal & Turner, community builders" and the landscape architect: "George Hay, landscape architect."

Avoid the brassy sound of *civic* by getting the association to name itself after the subdivision: "High Meadow Association."

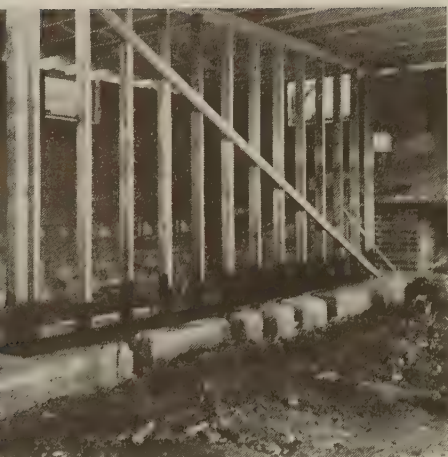
Set up the park for use of residents only.

"The pride of ownership of a private park," says Realtor Dave Pomeroy "is almost irresistible to home owners. It is so private the rest of the world doesn't even know the park is there."

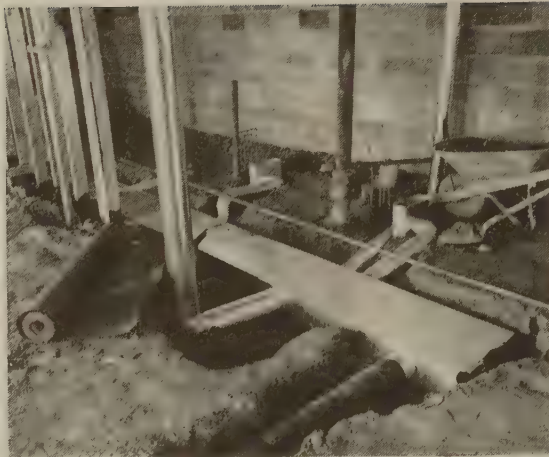
"It helps to have an attorney in the association: he'll help work out some of the legal problems," says Turner.

"Added taxes are no problem on the park. Since it's undeveloped land the taxes are negligible, amounting in our case to about \$.50 per association member in a previous community," says Jesse Seal.

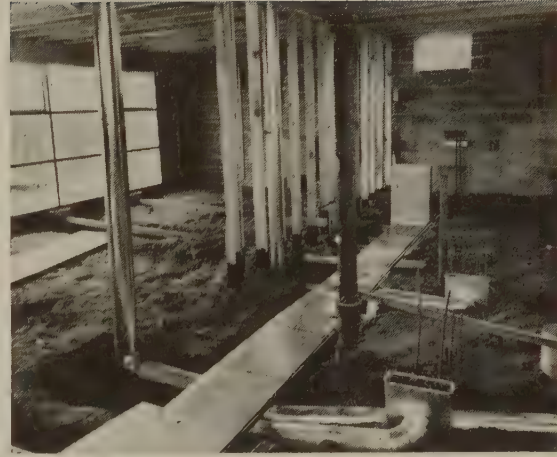
Big payoff for the builder is in greater sales. Seal & Turner found a magazine survey indicated that 25% of sales are made to people who drive through a development, like its looks. "Once a few garden-club-conscious buyers start to improve their landscaping, it catches on through the community. The association is a fertile field for garden-club interest. The builder can't lose."



Hillside houses built by Seal & Turner have 7' foundation wall set into slope at rear, complete wall out of ground in front facing view, far right. Rigid insulation is used only where full wall heights are above grade.



Main trunk of forced down-draft hot-air system is recessed in earth below level of grade beam. Crushed stone, 55 lb. vapor barrier are placed between earth and galvanized ductwork. Cavities in grade beam (left) allow tributary ducts off main trunk to pass to other side of grade beam.



Short horizontal runs heat first-story rooms recessed in hillside; longer runs travel to perimeter with registers under big glass areas overlooking view. Upper story heating ducts parallel the floor joists.



Concrete, poured above and around all ducts, forms protective channel for pipe. Builders use metal ducts because subcontractor works faster applying metal boots and registers when there is no change in type of materials.



After 6" bed of crushed stone is laid, same 55 lb. vapor barrier used under heat ducts is laid before pouring floor slab. Vapor barrier does not prevent ducts from warming floor while they carry heat to registers. Builders Seal & Turner (r. to l.) figure hot-water system would cost \$400 more.



Oversize ducts which can accommodate air conditioning at later date are recessed in closets or duct chases on lower floor. Builders lose slightly more floor space using steel I-beams which cannot be notched like wood.

Memo to split level builders:

Cure for a cold ground-level living area—heat ducts in the slab

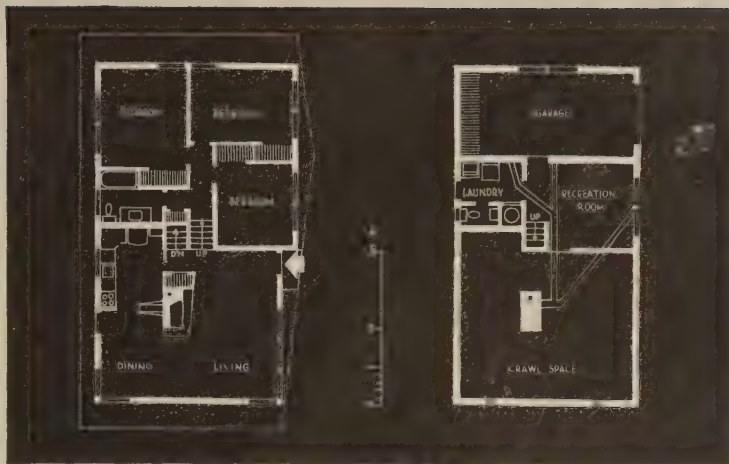
SEAL & TURNER, builders
 GEORGE HAY, land planner and architect
 DELVALE HOMES, sales agent
 WM. M. YOUNG CO., supplier
 COLONIAL MORTGAGE SERVICE CO., financing

Planning to build split levels? Heat with warm air? Here is something you should know:

A major complaint in today's split-level house is that people cannot keep their feet warm in the winter on the ground-level recreation-room floors (H&H survey last month). The difficulty: often this room is either not heated or heated inadequately.

Yet the biggest appeal of the split is the added play or recreation room at ground level. It is used most in the winter when children spend the great part of their time indoors.

Builders Seal & Turner who licked the cold ground-level living area in their hillside houses (H&H, Dec. '53) with a warm-air system (photos, opposite) are now applying the same simple system to their new split level. Added cost to heat play room: "\$35, and well worth it."



New split level (below) was designed by Architect George Hay for hillside. Builders will heat splits with same system as for hillside houses to prevent common complaint of cold recreation-room floors.

Photos: Lawrence S. Williams



Anatomy of a certified legal 'windfall'

US Tax Court, in test Gross-Morton case, upholds capital gains rate for \$6 million windfall on 608 project, says builders have right to shave costs to build capital gain

The government lost a major lawsuit late in January, and 608ers breathed again.

In a unanimous decision, the US Tax Court held that a 608 project "windfall" was a capital gain (taxable at 25%) instead of straight income (subject to taxes of up to 91%).

The test case was a blow to the Internal Revenue Service's projected efforts to collect an estimated \$1.5 billion back taxes in 1,400 pending suits. IRS said it would appeal, but the outlook was dim.

The 16-judge tribunal ruled that George and Alfred Gross and Lawrence Morton, a brother-in-law formerly associated with them in extensive building on Long Island, did not owe the Internal Revenue Service \$3 million additional income taxes on distributions to family stockholders in 1948 and 1949. The money in question was \$6 million left in the till after construction of the 2,928-unit, \$20 million Glen Oaks Village on Long Island.

How they saved. The court quoted a letter from the Gross-Morton interests to the FHA in 1949 in which the builders explained succinctly how they had come to have the cash on hand. Some \$4 million of it accrued from savings in construction of the big Glen Oaks Village project on Long Island, which carried a Sec. 608 mortgage of \$24 million; the other \$2 million came from land profit and related projects. The builders said they had saved on builder's and architect's fees, subcontractors' fees, free use of heavy building equipment and by using materials on hand. "By following this procedure," they wrote, "we left the excess funds in the company during construction and thereby remained in a far better financial position than if we had withdrawn the funds. . . . This procedure resulted in cash on hand in the corporation on completion of the project. We made capital distribution of the surplus."

The decision written by Judge Norman O. Tietjens agreed: "The surplus of mortgage moneys received by each of the Glen Oaks operating companies over the costs of construction and development was made possible for the reasons stated in the . . . letter."

No compensation. The government had based its case on the premise that the distributions to the three top officers of the corporations were actually salaries for their services and should be taxed as such. ("They were certainly entitled to compensation for the splendid services that they rendered these corporations," counsel for IRS asserted during an early hearing, putting an interesting new light on what other government officials had referred to as "unconscionable profits".) The Gross-Morton officers had not taken compensation for their "splendid services" and the Tax Court did not see why they should have. "We find no factual basis," read the decision, "for concluding that the distributions



PRINCIPAL PETITIONERS in the Gross-Morton tax case, which involved 11 members of the families, were Lawrence Morton (l), Alfred Gross (c) and his brother, George.

were in fact compensation or even in lieu of compensation. If the directors who were also officers chose to charge nothing for their services and the corporations paid nothing for their services the respondent is without authority to treat capital distributions to them as remuneration. Taxpayers have the right so to arrange their affairs that their taxes shall be as low as possible and the tax consequences flow from what they did rather than from what they might have done."

The beaten path. It is noteworthy that the Gross-Morton group took pains to include in their brief before the court a full explanation of how a builder negotiates an insured loan from FHA. The implication derived from such a move is that the petitioner (in this instance the builder) had nothing to hide. The law is there, he knows it, he is willing to be tested on it. (It is also noteworthy that the court mentioned that FHA "was agreeable to the building of this project because of the extreme shortage of housing facilities" and that the corporations in question were patterned on "the model form of certificate of incorporation issued by the FHA.") The 608ers' greatest defense against the calamitous cries of the investigators has come more and more to be the law. The Gross-Morton group makes no bones about the fact that their estimate of construction cost for the first 600 units of Glen Oaks Village was \$3,762,241;

that the FHA estimate was \$4,227,433; that they therefore revised their own estimate to conform with FHA's, withdrew the land (valued at about \$500,000) and thereafter used the FHA scale in estimating further blocks of Glen Oaks apartments up to a total of nearly 3,000 units.

FHA is not to blame for overestimating construction costs like these, according to the Gross Bros. office. "There's only one cost estimate basis with FHA," Al Gross observed at lunch with Associate Edward Dennis just after the big decision, "and it's the same for a one-family house as it is for a rental project. It has to be that way."

QUESTION: "What sort of a position would you be in today if your own estimate of \$3.7 million had stood?"

DENNIS: "We would have had a lower mortgage and a hell of a fine rent income."

GROSS: "We would have made it on the rents instead of the mortgage. If we had prepaid the mortgage the day after construction finished we would have been in the same position today."

Reaction from FHA. The tax decision had no direct effect on the matter of "windfalls"; in mentioning the fact that million-dollar distributions had been made by the petitioner, the court stated: "We are not unaware that the propriety of this action has elsewhere been questioned. However, the question of the propriety or impropriety of the distributions is not raised in these proceedings and we do not pass upon it."

Commissioner Mason was quick to agree. Said he: "No inference can be drawn from the decision that 'windfall' profits were either legal or illegal." Mason said the ruling would have "no effect upon FHA's own efforts to recover the so-called windfall profits."

Sen. Harry Byrd (D. Va.) burst out with this comment: "I think no one can quarrel very much with the US Tax Court decision today in the Gross housing windfall case, holding in effect that loose housing laws and lax administration of them could be exploited in a manner to make tax windfalls legal."

No sad songs. Sen. Byrd is fond of blaming the old law because he wrote the amendment to the 1954 revenue code making it im-



SECOND GENERATION of Gross and Morton families were also Glen Oaks Village stockholders (l to r): James Morton, Robert Gross, Executive Vice Pres. Edward Dennis (not involved in the Alan Morton and Richard Morton.

possible to mortgage out. But the old 608 law itself makes for no more ironic reading today than the pleas of housing officials accompanying its passage. The first page of a now-forgotten pamphlet called "Rental Housing for Veterans," published by the National Housing Agency and FHA in 1946, is typical. After the frontispiece heading, "A Challenge to Leadership. . . ." come such items as:

▶ "From the standpoint of financing, Title VI offers by far the most liberal terms currently available. With an insured mortgage loan up to 90% of necessary current cost, an efficiently operating sponsor-builder may recover through the mortgage substantially all cash expenditures. In such a case the sponsor's net investment might constitute relatively minor cash expenditure items which may not be financed under a Title VI loan, plus his unrealized construction profits."

▶ "Corporate mortgagors under Sec. 608 are not limited as to dividends or rate of return. . . ."

▶ "Accelerated depreciation for income tax purposes is permitted."

No rebates for tenants. Meantime, it seemed that if anybody was going to get the 608ers to give back their profits it would certainly not be the tenants.

The Glen Oaks management has been up against two lawsuits from tenants to recover mortgage profits or to reduce the rents in the project. The first was a federal case, brought by a resident of Glen Oaks who, when faced with a motion by the defendants to dismiss the case, agreed to withdraw with prejudice (meaning he could not reopen the case) if he were allowed to stay on in Glen Oaks. All parties agreed and the case closed amicably.

The second case was more difficult and its

influence to date much more important. Recent news was that the New York Appellate Division upheld by a 4-1 decision a lower court's ruling of last summer that the courts of the state did not have power to supervise or revise official acts by FHA under act of Congress. Because there was a dissenting opinion in the Appellate Division, the case may now be sent to the Court of Appeals. The pertinent philosophy of the case, however, appeared in the initial ruling by Justice Nicholas Pette. Confronted with a claim for \$2.5 million in rent rebates, among other matters, he wrote: "It [the complaint] is based upon the erroneous assumption that the federal housing commissioner was under a duty, if the actual cost of construction proved to be less than the cost originally estimated by him, to revise the maximum rents downward to give effect to the lower actual construction cost. It is clear from both the statute . . . and from the commissioner's regulations that neither the statute nor the regulations ever contemplated any downward revision of maximum rents on the basis of what the actual construction cost ultimately turned out to be. . . . There is nothing in Sec. 608 or in the regulations issued thereunder, which lends the slightest support to the tenants' unique attempt to dictate not merely the amounts of their rents, but also 1) what the amounts of the mortgages on the property should be, 2) what should be done by the landlord-corporation with funds in its possession resulting from the fact that the cost of construction proved to be less than the mortgages, 3) what should or should not be done by the owner about paying stockholders their capital investments, and 4) what should be done by stockholders of the owner about repaying profits distributed to them by the owner."

608 probe will continue, say Democrats; Sen. Byrd blasts results of FHA 'cleanup'

The Senate's 608 probe will continue under the Democrats, but with vastly different emphasis.

The departure of Sen. Homer Capehart (R, Ind.) as head of the investigation-minded banking committee—his last statement was that the Democrats seemed "reluctant" to continue the housing probe—did not mean the spotlight would be turned off. The Democrats accepted the challenge. Sen. John Sparkman (D, Ala.) head of the subcommittee on housing, told newsmen last month that a full-size study of all phases of the FHA program would be made.

He said the new inquiry would not be an "investigation" because it will cover the "good and bad" of the program. "We will expose the defects, but we also want to see how the new housing law is working out in producing needed housing. . . . We are not going to content ourselves with just two titles of the housing law. . . . [The Republicans] only picked out a few hundred cases. . . . We will go into all of it."

Progress to date? FHA, meantime, was voted an extra \$125,000 for the task of recovering "windfall" profits and Sen. Harry Byrd (D, Va.), who rode close herd on last year's investigation, issued a gloomy statement

that he had been "officially advised that progress on both civil and criminal housing scandal cases to date is slow and disappointing, due largely to loose law and lapse of time resulting from maladministration."

Byrd recited a series of criticisms of FHA made by HHFA administrator Albert Cole before the banking committee in Chicago last fall. Said Byrd: "Mr. Cole, who indicted the FHA on these 16 counts, [a couple of them were that FHA had "tended to measure success in terms of volume" and failed to "protect its own interests"] now advises me formally by letter that during eight months following the inauguration of open investigations into this agency, by administrative action pursuant to the investigations, he has removed three Washington FHA employees and accepted the resignation of a fourth. Among all the thousands of employees in numerous FHA field offices around the country, Mr. Cole says he has removed six others from office, accepted 13 other resignations, suspended three and reprimanded 29."



BYRD

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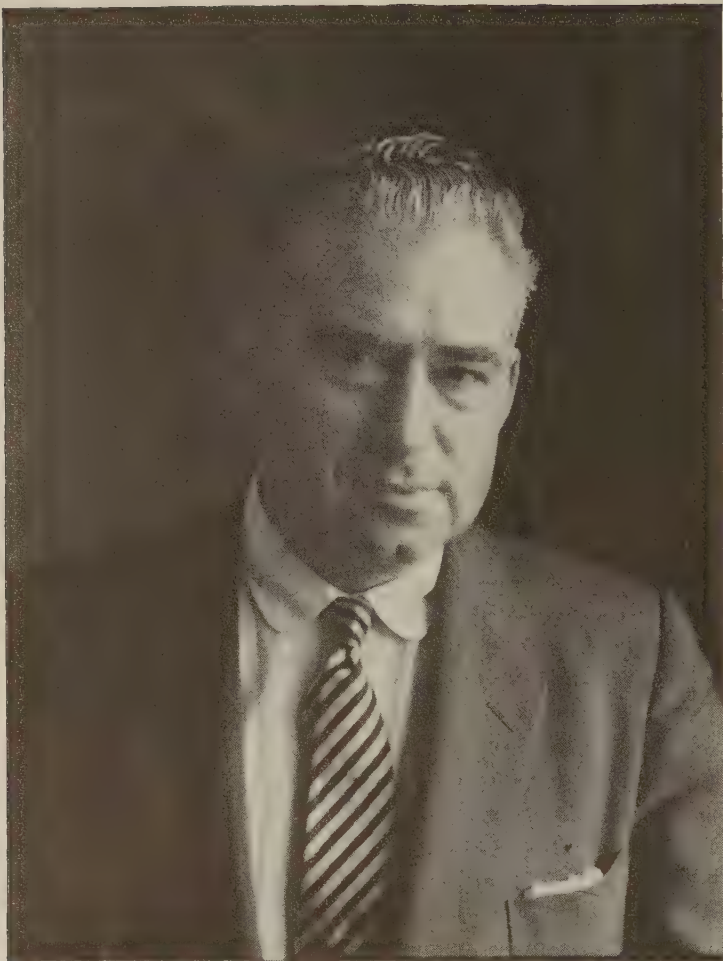
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Other NEWS on pp. 37, 38, 39, 41, 43, 45, 47, 49, 51, 52, 55, 58, 66, 70, 74, 78, 82, 86.

Byrd thereupon put Cole's list of the 55 FHA employees into the *Congressional Record* for better or for worse.

In the view of some builders, it was for worse. The reasons for suspension, reprimand, etc. are sketchily phrased. Almost all the 29 reprimands are for "the acceptance of gratuities." It seems an employee could get on the reprimand list for accepting four bottles of liquor from business associates at Christmas. This did not seem quite right to builders who had grown to like the field office men in their areas. In Portland, Ore., for example, homebuilders figured J. Guy Arrington, director of the local FHA office, reprimanded for accepting "gratuities," was "one of the most honest bureaucrats" they had ever seen. "We know he's strictly honest," said Al Norbratten, president of the local Home Builders Assn., "and we respect him and like him. Of course I've bought him lunches a few times when we've had meetings to discuss construction problems, and he's bought them too, just like businessmen always do. You always come out about even. Isn't a man supposed to be a gentleman and human being with the normal amount of friends because he works for the government? This thing is so petty it's silly. If they could think of something smaller, they'd do it."



NAHB president Earl W. Smith of El Cerrito, California

What kind of man is the new NAHB president?

Among all the 15,000 homebuilders in NAHB there is no one else like "Flat-top" Smith.

NAHB's new president is a colorful character who stands out from previous NAHB presidents and from all US homebuilders. Today, at 46, he has been a builder for almost 32 years. He has been an actor, artist, designer, carpenter, little builder.

And he was a little builder who, with a fine Horatio Alger flourish, became the fourth biggest builder in the country with a unique mobile operation.

Earl Smith is a big builder and NAHB president today because he had two ideas in 1947:

1. He wanted a low-cost house for the workingman.
2. He took a chance on modern architecture's direct approach and decided he wanted a new type of house with a flat roof.

On the day he finished drawing plans for his first flat top, he turned a crucial corner. He was through with being a 30-house-a-year builder; he was on his way to becoming a national figure. For it was his low-cost, flat-top idea that first made him top man in his local builders' association. Next the California State group gave him a sound platform for his "Shop Talk" sessions in NAHB meetings throughout the country. These activities helped him to become so well known and respected that he was elected president at Chicago in January.

But while it is his flat-top houses which have brought him fame and fortune, it is his wide knowledge of the building business, his good judgment, creative ideas, broad vision and attractive personality which brought him to the top in eight years.

"I'm just a carpenter"

This is one of Earl Smith's frequent remarks. He is proud of his long career, proud that he started working as a carpenter's helper

at 14 and proud that he was a little builder who grew big. His building background won him votes at Chicago. "He's pounded nails himself," said one builder with approval.

In fact, Smith is a fourth-generation builder. His great grandfather was a builder in Germany. His grandfather was a builder in Sauk Center, Wis. who Americanized his name from Schmidt. His father George, at a hale and vigorous 75, is still a 300-house builder in California. With his two brothers as associates, Earl can say he represents one of the most building-minded families anywhere.

Earl was born in Seattle, April 14th, 1908. When he was four the family moved to Los Angeles, but soon moved again to San Francisco's East Bay area where it still lives. George Smith was a man who believed more in practical training than in formal schooling, let Earl quit school at the end of the 8th grade. For three months Earl, always interested in drawing and design, went to a drafting school. But at 14 he went to work for his father, has been designing and building houses most of the time since then.

Earl the actor

During the 1920s, when Earl was growing up, San Francisco and Oakland had several active stock company theatres. One night



..... and this is Dee Smith

when Earl was sitting in the balcony watching a show he said to himself, "I could do that." He found that one of the theatre managers had a training group called Miss Fawcett's School of the Theatre. Earl read some tryout lines with enough skill to get Miss Fawcett's interest, joined her classes and was soon playing parts without pay. His first role was that of an old man.

"I always played character parts," says Earl. "I played old men, Greeks, Mexicans, Japanese and others." He continued pounding nails for his father, could get off for matinees and rehearsals, did most of his acting in the evenings. While his acting was centered around the Fulton Theatre in Oakland, he also played in San Francisco and in smaller towns in northern California.

"I was an amateur for about a year and a half, a pro for about the same period. Then the depression came and it was probably a good thing. I was just beginning to get good notices and if the stock company hadn't folded up I might have gone on and become just another actor."

But Earl's three years on the stage no doubt compensated for his not going to high school. Today he speaks well, has confidence and self assurance, handles a big meeting skillfully.

Earl the artist

The depression hit not only theatre business but George Smith's building business, too. Speaking of the depression years of the 1930s Earl says: "Like most building families we were in bad straits for a couple of years. My Dad's equities were largely in second mortgages which, of course, he lost."

So with the theatres closed and the building business shut down, Earl turned to commercial art. Long interested in drawing, he had taken some night classes at the California School of Fine Arts. While he would have liked to earn a living from "fine arts," he actually made his living for a couple of years from painting such objects as wall plaques, bookends and other staples

of book stores and gift shops. He and his father got back into building as soon as the times improved.

Today painting is Earl's only real hobby. He does about 30 paintings a year, some of which have been hung in art shows, but most of which hang in his home and office, are given to friends or just filed away. He did paint some murals in a South Seas restaurant he designed and built for a friend in Oakland. Over the years Earl's bronzed maidens have acquired a smoky patina. Though they are not Gauguins, they have helped make the restaurant a distinct success.

Earl used to have a real studio in his Berkeley house but that became a TV-family room so he now paints in a small room he calls the "toolshed." Most of his paintings are landscapes. He often takes Kodachromes when he is traveling, using them to refresh his memory. Thus painting has led to a second hobby, photography. He owns two good 35mm cameras, has a collection of lenses. He does not go in for any active exercise. "I don't think he would walk across the street if he could drive," says his wife. His chief interest is clearly his work and his NAHB activities.

Family life chez Smith

High among the tangible assets of the Smith family is Adelia Maynard Smith, known to her friends as Dee. Her photographs show she is an extremely attractive woman, but they hardly suggest her competence and ability. She not only runs their house and watches over three children, but manages and does the purchasing for about a dozen two- to four-family rental houses they own.

For several years after Dee and Earl were married in 1931 she continued to work in a San Francisco office of the Travelers. At a time when she might have quit she decided to work another year to save money for a piece of property they wanted to buy for a house. Then she worked another year to help pay for the house. Until about five years ago Earl had his office at home where Dee

A corner of the Smith patio in their Berkeley house. At left is 9 yr. old Geoffrey. Next is Duncan, 15, who has already worked as a builder, may become one. The Smiths' daughter is Noel, aged 12. Surrounding the house is Dee Smith's lovely garden. 18 years old, the house is so comfortable the Smiths don't want to move. "Our roots here go very deep," says Earl.





Minority houses are not new to NAHB's new president. He built some 426 like those above in one community, all of which were sold to Negroes at prices which ranged from \$6,200 to \$8,100.

New venture for the Smith organization was building houses for five of their top men at prices up to \$40,000. This is the living room of Henry Smith's house. Results, using typical Smith construction, were so good the firm will build new houses at \$16,500.

typed specifications and did practically all of the office work.

The house in which they still live was built in Berkeley in 1937. Earl did most of the work himself. It is a comfortable, livable place in a pleasant neighborhood. They remodeled it in 1946 so it now has four bedrooms, a big TV room and Earl's "toolshed." "It's not pretentious," says Earl, "but it's one the children can kick to pieces without causing damage."

"Our roots go very deep here. It's where our children have grown up and Dee has put a lot of time into the garden. If we ever build a new house it will be after the children leave home. And then it will be a flat top."

Earl and minority housing

In the late 1930s, as business in California began picking up, Earl began building houses again. One day in 1941 his bank asked him if he would do some houses on contract for a Mrs. Laura Clarke. When Earl met her he learned she was an educated Negro with two degrees from Columbia, although her husband was a Pullman porter. She had saved money and wanted to invest it in houses. Earl, not much interested in building for someone else, told her he did not want to build on contract and that a cost-plus arrangement would not be fair to her. She asked: "Why not?" Earl said: "Well, you don't know me or how I work." But Mrs. Clarke said she trusted him and they went ahead. In two or three years they built some 30 houses.

"I owe a great deal to her," says Earl. "She had a tremendous fund of common sense and she taught me a lot about people." It may have been Mrs. Clarke's influence which later caused Earl to build 426 of his flat-top houses in one area, all of which were sold to Negroes at from \$6,200 to \$8,100.

During the war he built defense houses in the East Bay area. After the war he continued to build the typical California-style, low-cost bungalow. He built in the low-cost field, since that is where he believed his best market was. It was in an effort to build more efficiently for less money that he designed his now familiar flat top in 1947. He tried to get FHA approval for the design but was turned down. "You'll go broke if you try to sell that house," he was told.

Birth of the flat top

He knew he could not get financial support until he had a house to show, so in one of his own neighborhoods he began the prototype. Word traveled fast that a flat top was going up and some busybody got the neighbors to sign a petition against it. Earl went to every family, telling them he wanted to finish the house and if they still objected he would take it down.

As soon as the house was finished Earl showed it to a mortgage man. The banker had just finished explaining why the public would not like the house when a red convertible squealed to a stop and the young woman who was driving it said: "What a beautiful house! If it's for sale I'd like to buy it."

Those were the sweetest words the builder had ever heard.

"It's for sale and you can have it," he told her.

The next day she brought her husband and they became the first of thousands of young couples who have bought Smith flat tops. The neighbors found the house didn't look so bad and withdrew their objections.

Gradually the mortgage men and FHA also swung to Earl's side. In fact, FHA's regional director soon suggested that Earl build a group of 64 houses in a neighborhood he knew needed some low-cost houses. Earl built that group and was gratified they won an NAHB prize. Today that FHA official, D. C. McGinness is himself an associate of Earl's and is building Smith flat tops.

The most mobile builder

If it is fair to say that Earl Smith began his real rise to fame with two ideas (the low-cost house and the flat-top house), it is also fair to say that it took a third idea to get him into the big money. That third idea is mobility.

Essentially a small builder in small towns, Earl Smith saw that if he wanted to build a lot of houses he would have to build in a lot of towns. He has pushed that idea until he is now the country's most mobile builder. Quite a few builders, especially in the far West, build in several towns. But no one builds in as many as 25 or 30, which is what Smith does.

(story cont'd on p. 146)



Four bedrooms, two baths for \$8,695 helped to build reputation for Earl Smith. His interest has been to give as much house as he could for the low-income family and the above house is one of his best achievements. This model is stucco, some have wood siding. Roofs are always flat, houses always on slabs. Published in *LIFE*, this house brought Earl national publicity.



Rear living and concrete patios are standard Smith features. Three-bedroom, one-bath house, left, with fireplace and carport sold for \$8,100 with about \$100 extra for the paved terrace. Many models have floor-to-ceiling windows like this. Overhangs are on all current models.

His own designer, Earl Smith takes pride in every row of his houses in the many towns of northern California. "Building a house someone else had created would take away half my pleasure," he says. Working on a drafting board is a hobby. He may carry one to Washington.

Photos (below & above left): Roger Sturtevant





Smith's general staff: Seated, l to r: Robt. Watson, Rae Smith, Henry Smith, Roland Brandt, Earl Smith, Don West, Carl Lans, Fred Martin. Standing: Wm. Barry,

Chas. Savio, Richard Proda, Wm. Peloyan, Ernest Tate. Comptroller Chas. Dyer was absent. These men run the vast organization when Earl Smith is doing NAHB work.

Photos: Kaiser Services, Commercial Studios, R. Uribe, L. Kenney

He may not build in all 30 towns at once, but he does build simultaneously in 15 or more and he moves in and out as the market can absorb his houses. Last year families in the northern California towns bought 2,816 houses which made him the fourth largest US builder.

His operation works like this. He may get an invitation from a community to come in and build some houses. Or his own scouts tell him a town needs houses. Then one or two of his men do a market analysis, study the town, talk with FHA and bankers. If they decide to try out the market, Earl buys one or two lots for a model house, takes options on as much land as he thinks he might use. They build a model, furnish it, take orders. They usually build only after they have taken firm orders.

Once the Smith organization decides to build, Vice President Carl Lans (former NAHB technical director) chooses the subs, does preliminary planning with FHA, VA, the county, etc. He is the advance man, making all preparations before building begins. After construction starts, Earl's brother Rae takes over, usually working with one of their field superintendents who knows the Smith procedures. When the houses are going up, sales are handled by brother Henry Smith. There are about seven key men in the group, each a specialist. They know their jobs so well that they can move into a town and make a profit on as few as 35 or 40 houses, but built up to 462 in one town last year.

In addition to the parent group, the Earl W. Smith Organization, there are related subsidiaries. Earl works with several "associates" like his father and his brother-in-law, William Maynard, each of whom built around 300 houses last year. For the associates, Earl provides house design, precut lumber and he usually



Typical Smith evening. Earl with Eastbay Homebuilders' executive secretary (executives' nat'l. president) Jack Hennessy (left), FHA District Dir. Dick Briggs, NAHB past president Alan Brockbank.



Shop talk sessions run by Earl Smith helped bring him national attention. A nail-pounding builder himself, he not only had a keen interest in cost savings but knew the technical angles. This was at New Orleans. At the blackboard: Len Haeger.



"For outstanding contribution to homebuilding" Earl won the first Alvin Groom Memorial Award in the Eastbay area. At right: Duane Sarles, San Francisco VA; left: Dean Morrison.

does the selling. However these associates build their own houses.

For three or four "entrepreneurs" Earl does practically everything, including the building. These men take financial responsibility, buy the land (which Earl may find for them), sign the checks, but are largely financial partners. They provide capital, spread the risk, help build up volume production.

"We always buy retail"

For a big builder Earl Smith has a buying policy which seems strange to many other builders. He buys on a cost-plus 13% through the Griffin Building Materials Co. next door to his office. His men, using his saws, do a precutting operation but Griffin delivers the lumber. Smith buys as much as he can locally in each town. "We let the people in the town participate, so the local people also render a service," says Earl. "It is not good to go into a town, make a profit and take it all out. We don't involve ourselves in mass buying. We buy at retail."

His precutting operation is by no means prefabrication because little but bundled lumber is delivered to the job. But Earl thinks it is better than prefabrication. "I can send lumber for four or five houses out on one truck while a prefabber needs a full truck for one house." He thinks any small builder who keeps up with new ideas and who builds efficiently can survive in the prefab age.

Quality houses

Since 1947 the Earl W. Smith Organization has been building houses which have grown larger and better equipped but which are basically the same construction. This spring in Marin County he

will start a brand new project of 1,400 sq. ft. houses that will sell for about \$16,500. Each of them will have three bedrooms, two and one-half baths, a TV room or a maid's room, almost continuous rear windows, four ft. overhangs, a big patio and rear fences. (For a photograph of one of the living rooms, see p. 144. The houses were not occupied until last Thanksgiving, too late to be landscaped for exterior photography.)

He got interested in this price market after his firm had built five luxury houses for his brothers and three associates. Their standard construction methods and flat roofs worked out so well Smith decided to put a smaller version into production.

Saturday farms

A second new project about to open is a \$10,000 package for week-end farmers. These will be three-bedroom, two-bath flat tops with a huge carport on half-acre lots and "will be geared for country living." Earl has been working with the agricultural department of the University of California and with 4H clubs. Purpose is to give young families a chance for year-round living where they can also have small farms, can keep animals, have fruit trees and real gardens. The first farm project is in the San Joaquin valley, farther away from a town than he usually builds but Earl wanted to find land cheap enough so he could give big lots. This is an extension of his first idea of building a house for the low-income family.

His ideal has never changed since he said to H&H in 1951: "It would be easy to build a better house at more money. But my aim is to build a good house at less money. That's a real job."



Architect Donald H. Honn, who cut his production design teeth with Big Builder Howard Grubb, walked off with more prizes at the Chicago NAHB convention and exposition than any other architect. Designing for Grubb of Tulsa he won the *Parents' Magazine* regional award for houses under \$16,000. Designing for R. B. Walden & Company of Lubbock, Tex. he took the *Parents'* award for houses over \$16,000 (below). He also won an NAHB design merit award for Grubb-built houses this year and last. Honn also designs for the Allen Wall Panel Co., Fort Wayne prefabber, has another prefabber interested and is designing for other Southwestern builders.

Best sellers in Lubbock, Tex., these houses prove that people are ready, willing and able to pay for quality houses and want bigger houses.

After reading about *The big change in builders' houses* (H&H, Jan. '54), Builders Walden and Jennings made a swing through the Southwest to see what other builders were doing. At that time, they were getting ready to build lower-cost houses and were trying to find ways to produce them without lowering the quality they had built their reputation on, such houses as the \$38,000 one below, opposite. After visiting Architect Honn and Builder Grubb, they decided that "contemporary architecture" was the answer.

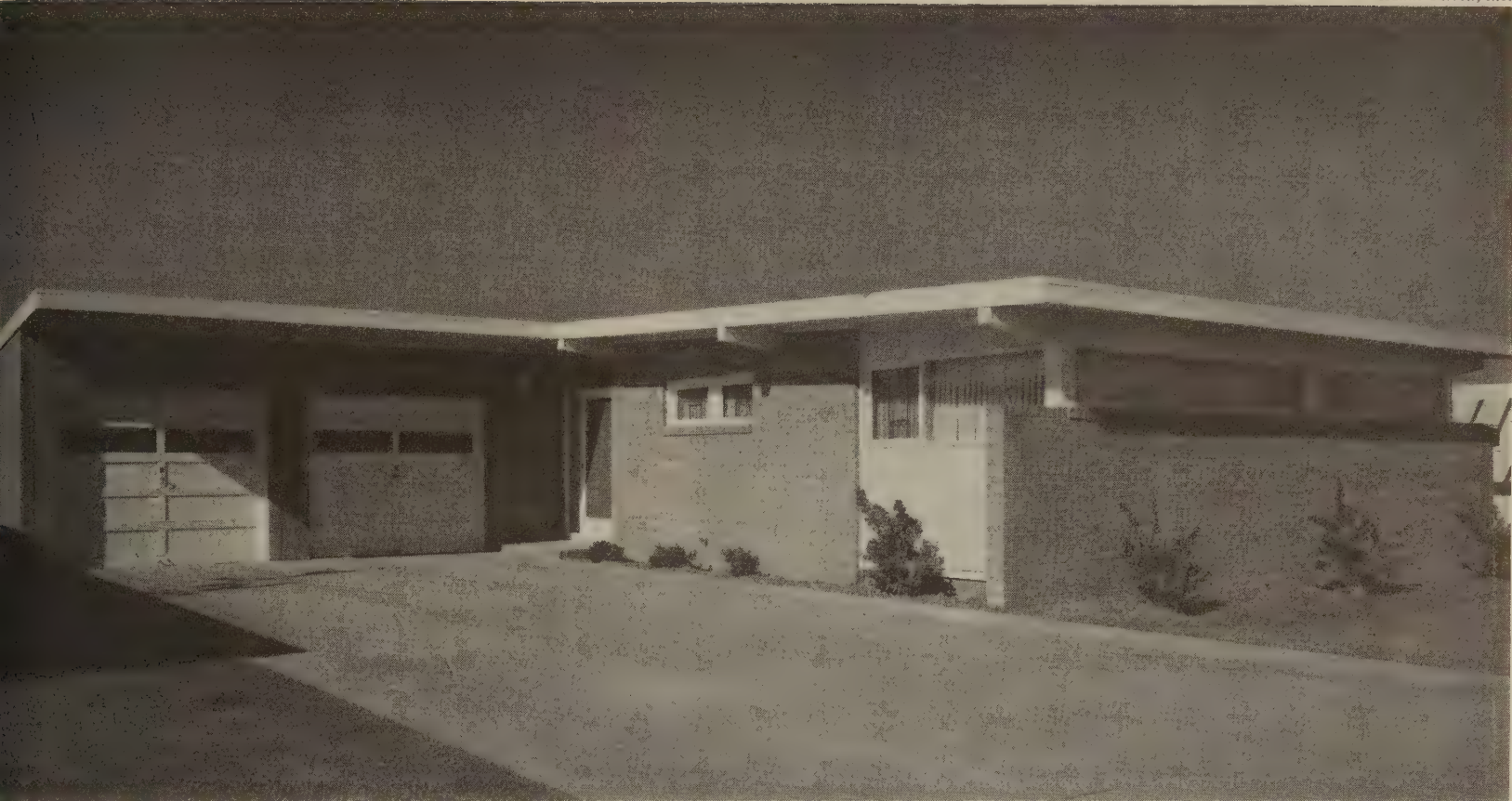
Walden and Jennings countered the square-foot pricing of their competitors with such luxury features as air conditioning, dishwashers, garbage disposers, built-in ranges, two baths, kitchen exhaust fans and fencing in a three-bedroom house with attached garage. Price: \$16,475 for 1,350 sq. ft. But the builders also found that people wanted more space. Result: they banished the breezeway, substituted a 325 sq. ft. family room. Price: \$17,250 for 1,675 sq. ft. Sales record: 27 houses at about \$17,000 in three months. They also sold 50 houses (average price: \$11,000) in six months.

Architect helps small builders grow big

Parents' Magazine prize winner: house with enclosed breezeway. Note how architect gets variety by changing roof pitches, shifting masses

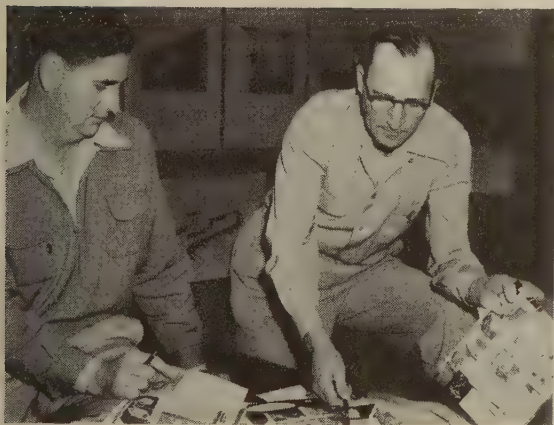


Hawks-Terrell, Inc.



"Lortondale" model with two-car garage was popular with two-car families. All buyers liked use of bright primary colors on wood paneling

with prize-winning designs



Jim Dallas Studio

R. B. Walden (left) and partner, Cecil Jennings (far left) used to build 15 houses a year in the \$20,000 to \$150,000 class, became the biggest builders in Lubbock within six months of starting to build Honn-designed houses. Walden capitalized on the pre-planning done for him by the Honn-Grubb team in Tulsa. Not daring to tamper with Grubb's successful formula, Walden even named his three subdivisions and models after Grubb's. He is convinced now that he must offer new models like the "Lortondale" (above) each year to stay ahead of competition: "At least three competitors are copying our style."



Quality house, priced at \$38,000, was typical of designs R. B. Walden & Co. built before switching to houses designed by Honn. Walden's aim was to produce a lower-priced house with the same high-quality standards, found he could do so by using all No. 1 kiln-dried lumber pre-cut from his local lumber dealer. "By substituting an approved No. 1 2" x 6" for a No. 2 2" x 8" we made a 15% material cost saving, found we had no nail popping and callback problems. Save lumber, save labor, save money!" New houses were also engineered for standard materials and dimensions. For more, turn the page.



Breezeway version



Family room version

Parents' Magazine citation read: "[Family] room is well located to rest of house and yard. Second bath adds to family's convenience . . . [House] comes equipped with additional plumbing in kitchen for washer and drier."

Builder Walden's salesmen "are enthusiastic because Honn forgot nothing, including a place for water softener."

His carpenters like the design so much that "not one wants to go back to building the old house." Reception of the designs, Walden says, has been universally favorable from bankers, realtors, government agencies and the public. Only exception: some older women whose initial reaction to the contemporary style was "Well! I don't know!"

Perhaps best liked of the many extra features in the houses is the air conditioning. Until recently, the public in Lubbock thought of air conditioning in terms of swamp-box evaporative coolers. Walden installed air-cooled equipment with a net cooling capacity of $2\frac{1}{2}$ tons (builders please note!) with a 4 h.p. compressor motor to insure complete cooling in the bigger (\$17,000) houses, smaller units in the smaller (\$11,000) houses. Units take up only 21" x 32" of closet space plus side clearance, are "space savers."

Heating system, also thoroughly engineered, netted the builder 50 complimentary calls when temperature dropped to 2° . House was designed for 0° .

Family room,



Paneled walls, oak block flooring, dry-wall ceiling are features of family room, viewed here from doorway of living room. Doorway behind seated girl leads to single-car garage. Buyers who took houses with breezeways did so planning to convert them later to 10' x 17' family room like this.

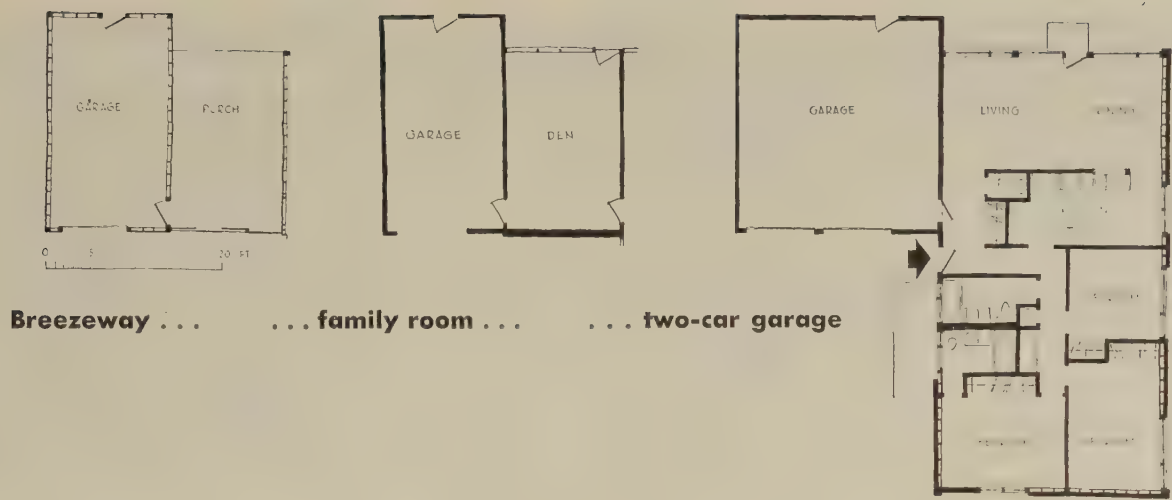
LOCATION: Lubbock, Texas

DONALD HONN, architect

R. B. WALDEN & COMPANY, builder

LONE STAR TRADING POST, financing

Living-dining room (right) is 25'-8" long, 13' wide. Pass through and entrance to kitchen are at right. Along full length of room at left are floor-to-ceiling windows, with a door to rear lawn and two movable, screened sashes. The roof overhangs about 4', keeping out sun during heat of day. At least nine out of ten buyers preferred living-dining room in rear of house. This was true of both the Lortondale model and the lower-price (\$11,000) Dollie Mac model.



big living-dining area were major attractions

Photos: Hawks-Terrell, Inc.





Air-conditioned Village report:

This house was cooled all summer for \$73



Engineer C. W. (Bill) Nessell

He planned and executed the rigorous field tests for the 22 houses. Then in a detailed preliminary report given to NAHB in Chicago he pulled no punches in reporting mistakes, as well as successes.

Roy Stevens



Architect-BUILDER Ned A. Cole

He conceived the research project, then served as its manager, expeditor and chief arbitrator between NAHB and many behind-the-scene cooks. He also designed the house shown above.

- The 22 houses in Air-conditioned Village show more clearly than ever before how little it costs to air condition a well-designed house with a well-designed system.

- Yet several things went so completely wrong that some of the houses are stern examples of mistakes to avoid.

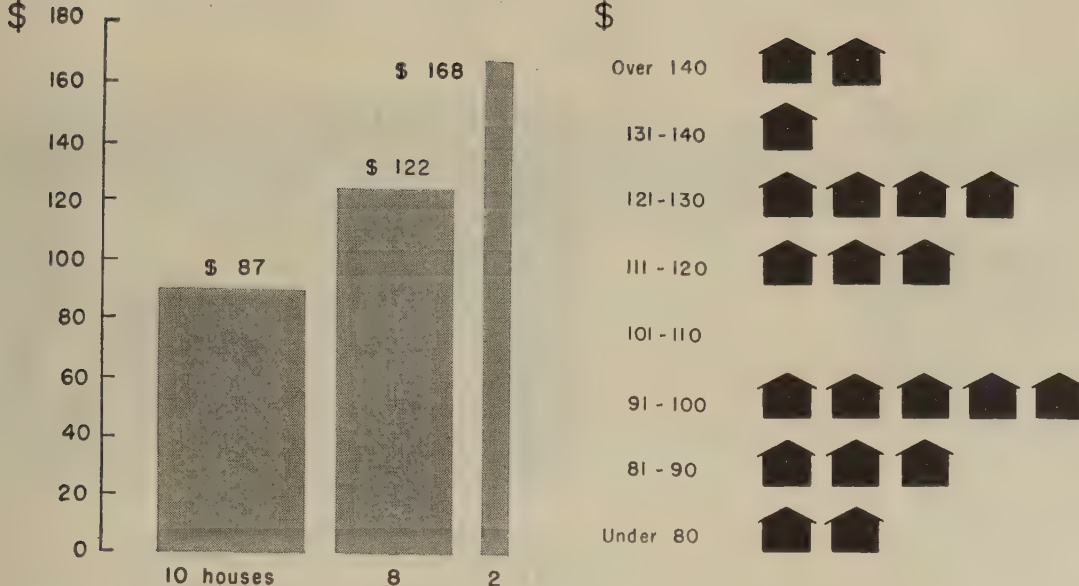
- Despite the mistakes, the home owners are delighted with air conditioning, say they would never buy another house without it.

In short, the NAHB Research Institute brought in a gusher of valuable information from Austin, Texas. Some of this information was reported to the NAHB convention in Chicago by Ned Cole and C. W. Nessell (left). More was turned up by a door-to-door canvass in Austin by a HOUSE & HOME editor, which answered such questions as:

Why did some houses cost twice as much to cool as others?

What part did the human factor play in the low costs of some houses, the high costs of others?

Why were some systems noisy and what's wrong with FHA's noise limit?



Cost breakdown by H&H shows houses fall into three groups: ten cooled for less than \$100 with an average cost of \$87; eight cooled for \$112 to \$132, an average of \$122; and two had an average of \$168. Total bills for 20 houses are known; data on two are unavailable.

Above: what the houses cost to cool in Austin

Below: what they would cost to cool in other cities

Map shows what cooling would have cost for same houses in random cities, based on \$109 over-all average in Austin. Costs were estimated by H&H's technical staff, according to degree-days, and local electric rate for each city. Low cost in a hot city like Las Vegas is due to cheap electricity.



Why did its neighbors cost up to \$172?

On the other hand: all but one of the cooling units worked well, though ductwork was another story.

Unvented clothes driers were a big reason for high costs.

Humidity still needs a lot of attention from the manufacturers.

Accent on house design. Total power cost for cooling the 1,146 to 1,468 sq. ft. houses over five months last summer averaged \$109 per house*—but the individual costs ranged all the way from \$57 up to \$172 per house. Half of the houses were cooled for less than \$100, although it was one of the hottest summers on record. The extra cost for water averaged only \$2 per house all summer because every house had a water-saving device.

The houses with the lowest costs were chiefly those with heavy wall and roof insulation, shading devices over their windows and good orientation. The high cost houses are notable for few shading devices, unvented driers and poor orientation.

Said Ned Cole: "Poor orientation was suicide." He disclosed that an accidental shift of only 7° from south to west in one house nullified the shading effect of a 36" south overhang. The increased sun load pouring through a big window boosted the over-all heat load by 4,200 Btu's and lifted the operating cost about 15%.

Extra dividend. The fact remains that even the families with the high bills are delighted with air conditioning and not one

says the cost is excessive. What they do say: "We used to have a room cooler plus several fans and electric bills hit \$20 a month. For only \$5 to \$10 a month more we now get full air conditioning."

Even more important: "Our heating bills this winter are virtually nothing compared with what they used to be because these houses were so well insulated for air conditioning. This offsets part of the summer bills." One expert estimates that the families will save as much as 40% on fuel compared with bills in their old houses, and this discovery alone brings out two major facts:

1. Although the fuel saving may only be a flat \$30 a winter in Austin (because of mild winter climate and cheap gas), when you deduct it from the \$109 average cost the *net* bill for air conditioning last summer falls to \$79 per house. For the best houses it is even lower, showing how really cheap air conditioning can be.

2. When a house in the North is designed properly for air conditioning a 40% saving on heating would often pay for summer cooling. Air conditioning would, in effect, be free, showing how much good construction and good design can pay off.

* Or \$21.50 per month based on Austin's 1.6¢ per KWH electric rate. Although the study did not begin until June 15th, total summer cooling bills were arrived at by Texas Power & Light Co. engineers who estimated early season costs on Weather Bureau records.

Many air-conditioning manufacturers still have a job to do educating 1) their dealers and 2) the people who live in air-conditioned houses. Despite the national attention focused on the research project, many of the systems were installed badly; many owners did not know enough to keep the system running at night, exhaust kitchen heat, keep windows shut tight on hot afternoons, and let the dishwasher cool before lifting the lid.

Attic ducts were inefficient. Poor ductwork was, indeed, the greatest single headache.

In one "inexcusable" case a 24' long duct was installed in the attic without insulation. Cool air flowing through the duct picked up 26° of attic heat before it reached the house!

Even insulated attic ducts were not very efficient. Cool air distributed through them picked up an average 4.8° of heat; this is almost twice the heat pickup in houses with ducts under the ceiling (2.8°). Nessell comments that "the loss of cooling capacity from attic ducts is an irretrievable loss, while cool air leaking from ducts inside the house may still do some good." (However, overhead diffusers did give very even floor-to-ceiling air circulation.)

Conclusion: *avoid attic ducts if possible. Otherwise insulate them to the hilt and make sure they are properly installed.*

Noisy systems were a problem. But Nessell says noise was due as much to poor installation as to chattering units.

Trouble spots: units on wooden platforms that vibrated audibly, an attic unit put over a bedroom, equipment set flush on a slab floor without a resilient pad underneath to cushion vibration. At one time or another, 19 of the systems made more noise than FHA's allowable limit of 40 decibels; i.e., only three would be passed by FHA. However, when asked, only eight families complained of noise. (Acoustical engineers say a quiet house ranges up to 45 decibels.)

Conclusion: *FHA's 40-decibel limit is obviously too stiff, but equipment must be carefully installed to minimize noise.*

The 2-ton units were ample. Although the test houses were far from perfect in their design for cooling, these units proved big enough to cool them despite the taxing Texas heat.

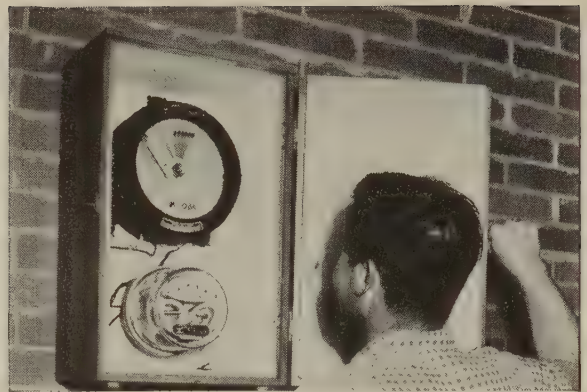
"Under actual conditions," says Ned Cole, "the equipment maintained an average 77° indoors at an average outdoor high of 103°." This is a 26° pulldown whereas some skeptics said that 20° would not be achieved. Only one 2-ton unit was too small, and then only because the owner not only enlarged his house considerably but also installed an unvented drier.

Conclusion: *a 2-ton unit can handle up to 1,400 sq. ft. in the 100° South, more in 95° cities like Chicago and St. Louis.*

Pretest heat load calculations were not right. Nessell says present heat gain prediction methods are "grossly inaccurate." Several houses were initially rated at 3 tons; yet 2-ton units did the job. Conversely, some houses tagged for low heat gains ended up with the highest costs. This is chiefly because they had unvented driers. It is important to note that the heat gain calculations were *not* based on the new 24-hour method, which may have made a difference.*

Conclusion: *the industry should take a fresh look at its heat gain forms. (The 24-hour method some firms use may be the answer.) And builders must eliminate unvented driers.*

* The 24-hour method credits the structure for its thermal storage capacity. Lower heat gains result because the cooler is sized to operate 24 hours a day during hot weather.



Special meters kept continuous record of electricity used for cooling each house. Other instruments recorded inside temperatures, humidities, air velocities, noise levels, etc. (The initial operating cost data released in Chicago contained errors for seven houses which were discovered later; H&H's \$109 average, plus individual house bills given on pp. 156-157 are the corrected figures with allowance for the mistakes.)

Units were often handicapped

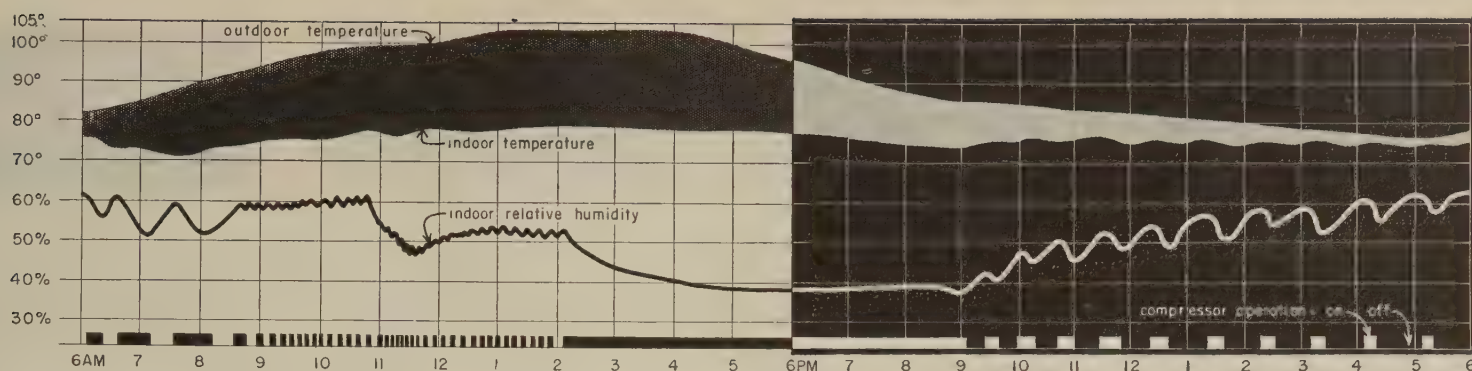


Mobile laboratory was assigned to the houses by the National Warm Air Heating & Air Conditioning Assn. Engineer Nessell, field research chief for the association, scheduled the truck five to ten days at each house.

Photos below and opposite: Dewey G. Mears



Major bottleneck was wiring—the "highest single cost item" excluding equipment, says Ned Cole. Ductwork was next. Control wiring (top right) was so complex Cole recommends it be fully prewired for plug-in installation.



What happens on a 103° day? This 24-hour chart of last August 11 shows indoor temperature rose to 79° as outdoor temperature soared. Most important: this compressor was oversized so evening humidity increased sharply—as unit cycled on and off—to a high of 63% at 6 A.M. Though this is not uncomfortable per se, high humidity increases odor perception and people complained of “mustiness,” conversely humidity under 50% reduces odor perception.

by poor installation and use



Outside awnings were a dependable cure-all. Because of torrid sun and poor house orientation several cooling units were hard put to maintain indoor comfort. When awnings were added over windows they sharply reduced the sun load and the units had clear sailing.



Appliances added substantial heat inside houses. Besides unvented driers, houses had washers, dishwashers, sterilizers. TV sets alone give off up to 1,000 Btu's per hour. Yet all but one cooler did the job.

“Long continuous operation” is the key to good humidity control, says Nessell.

The best humidity charts came from houses where the compressors ran around the clock. This kept moisture at a constant level for comfort. Equipment with dual-compressors—two 1-hp. units in tandem—gave excellent humidity control because one compressor ran all the time. Poor humidity control occurred in houses where the compressor repeatedly cycled off and on; the humidity rose sharply each time the compressor went off. Reason: moisture on the cooling coil was blown back into the house, since the fan kept running. But only a 30% minority of the home owners reported spotty humidity conditions.

Conclusion: every house demands a properly sized unit—one that runs up to 24 hours a day in hot weather. Too big a unit will mean poor humidity control. A slightly undersized unit would be better.

Exhaust fans need attention. Kitchen exhaust fans could have been more effective but women forgot to turn them on or left them off because they were noisy (due chiefly to poor installation). They used them only when cooking heat or odors became excessive. “But then they sure make a difference,” said one housewife.

Conclusion: to rid the house of kitchen heat and moisture, fans may need automatic controls that turn them on when the range is on. (It is also important that the kitchen window be opened a few inches to allow replacement air to enter, closed when the fan stops.)

Equipment condensation must be stopped. The final score shows that only one of the 22 coolers was a dud (not a big-name make); it consistently pulled excess current though it should have cooled its house handily. The overwhelming majority of units performed very well. Strangely, the only real trouble spotted was condensation in the furnace section of eight units. It was caused by cool air leaking over from the cooling section. (Reason: hot outside air came down the flue and made contact with the inside of the heater. When the same metal was chilled, moisture from the outside air condensed.) Rust and corrosion will result if condensation continues.

Conclusion: builders and dealers must make sure that ducts and dampers are tight around the heater so cool air will not leak in. And some manufacturers should add insulation to cabinets to prevent the heater from being chilled.

The boxscore: how the houses rank

Which is the best house in Air-conditioned Village? This can be answered only by a close study of the houses shown, right, in order of operating costs. Here are the chief factors that made the total cooling bills range from \$57 to \$172 per house:

House design. The ten houses that were cooled for less than \$100 have an average 6" of ceiling insulation (or the equivalent in aluminum foil), with 3" in their walls, and almost all have deep overhangs and many shading devices to keep hot sun off east and west windows.

Attic ducts. Significantly, only one of the ten lowest cost houses has its ducts in a hot attic; two others have attic ducts but aluminum foil under the roof rafters helped keep *these* attics cool (see p. 133, Aug. '54 H&H). But four of the ten high-cost houses have their ducts in hot attics—a big reason for inefficient cooling.

Unvented driers. Four of the five highest cost houses have unvented driers, which blasted heat and moisture into the houses almost daily.

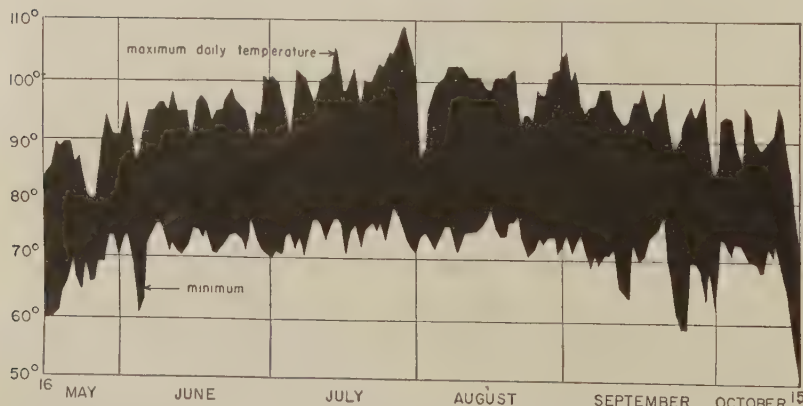
Thermostat settings. Some families kept their houses as cool as 70°, others up to 78°. This is important because the lower the temperature the harder the compressor works. Lowering the temperature by one degree is equivalent to boosting the over-all heat load by about 1,000 Btu's.

Children. The number varies from none up to four per family. Children put a strain on air conditioning by running in and out and make it necessary to run heat-producing appliances more. (Automatic door closers and the venting of every drier would tend to equalize these losses.) But families with several children generally kept their houses at 76° to 78° ("so the kids won't catch cold"), while families with few or no children generally kept *their* houses as cool as 70°. Thus the cooling advantage of not having children was often canceled out by the high cost of a low thermostat.

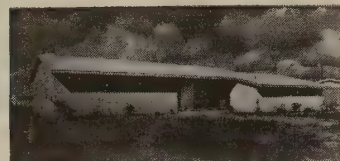
Air-cooled condensers. Four of the five houses with air-cooled condensers are bunched between \$124 and \$134. This is because air-cooled condensers cost about 15% more to operate in a hot, relatively dry 100° city like Austin, than cooling towers. (But cooling towers are less efficient in 95° cities like Houston and New Orleans where wringing humidity is the problem. In such cities air-cooled condensers would have cost less to run than in Austin.*

* Nes ell points out that the air-cooled condensers may cost less to service than towers which are "more subject to rust and corrosion."

How the above factors varied the cooling bills can be seen in the house-to-house comparison at the right.



Temperature chart is daily record of 1954 Austin weather for the period that the operating costs embrace—May 16 to October 15. Temperature hit 100° or hotter on 31 days, a high of 109° on July 26. Nessell will issue a final report at a later date comparing the influence of different structural materials on cooling efficiency.



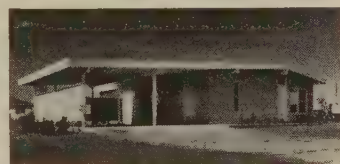
1

Cooling cost data: \$57; 1,270 sq. ft. house
House design: 6" ceiling insulation, 4" in walls plus insulation board sheathing, 36"-60" overhangs
Family: two working adults, no children
Cooling system: 2-hp. unit, cooling tower, ducts under ceiling in furred-down hall
Thermostat setting: 76° (but unit often turned off)



6

Cooling cost data: \$95; 1,390 sq. ft. house
House design: white built-up roof with 3" rigid insulation, 4" wall insulation, 36" overhangs, awnings on southeast
Family: two adults, no children
Cooling system: 2-hp. unit, cooling tower, slab ducts, floor registers at outside walls
Thermostat setting: 73°



11

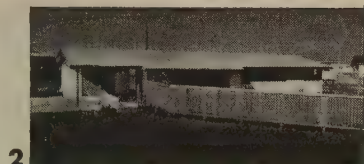
Cooling cost data: \$112; 1,170 sq. ft. house
House design: 4" ceiling insulation, 2" in wall's 32" overhangs, shade screens over glass
Family: two adults, one child
Cooling system: two 1-hp. compressors, cooling tower, under-the-ceiling ducts
Thermostat setting: 76°-78°



16

Cooling cost data: \$128; 1,264 sq. ft. house
House design: 5" ceiling insulation, 2" in walls 36" overhangs, large glass areas, poor orientation, unvented drier
Family: two adults, two children
Cooling system: 2-hp. unit, cooling tower, attic ducts
Thermostat setting: 76°

Photos: Mears, Malone



2

\$73; 1,224 sq. ft. house

aluminum foil under rafters, 6" ceiling insulation, 4" in walls, 36" overhangs, best orientation

two adults, three children

2-hp. unit, cooling tower, attic ducts, ceiling diffusers

78°



3

\$83; 1,216 sq. ft. house

5" roof insulation, 3" in walls, 36" overhangs, window awnings (because of poor orientation)

two adults, two children

2-ton gas unit, cooling tower, under-ceiling ducts in center hall

75°



4

\$83; 1,200 sq. ft. house

aluminum foil under rafters, 4" ceiling insulation, 2" in walls, 24" overhangs, awnings on southeast

two adults, two children

2-hp. unit, cooling tower, ducts under ceiling in furred-down hall

78°



5

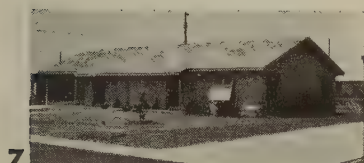
\$87; 1,200 sq. ft. house

6" ceiling insulation, 2-ply foil in walls, 30" overhangs, shade screens over glass

two adults, no children

2-hp. unit, cooling tower, crawl-space ducts, low wall outlets

72°



7

\$95; 1,248 sq. ft. house

foil under rafters, 6" insulation in ceiling, insulation-board sheathing, outside awnings

two adults, one child

two 1-hp. air-cooled compressors, attic ducts

none (on-off switch, only)



8

\$97; 1,210 sq. ft.

4-ply foil over ceiling, 2-ply in walls, shade screens over glass, 30" overhangs, poor orientation

two adults, one child

2-hp. air-cooled unit, under-the-floor (crawl-space) distribution

75°



9

\$99; 1,146 sq. ft. house

6" ceiling insulation, 3" in walls, 24" overhangs, shade screens over glass, good orientation

two adults, two children

2-hp. unit, cooling tower, ducts under ceiling

75°



10

\$99; 1,258 sq. ft. house

6" ceiling insulation, 4" in walls, 30" overhangs, awnings on north-east and southwest windows

two adults, three children

2-hp. unit, cooling tower, attic ducts, overhead ceiling diffusers

76°



12

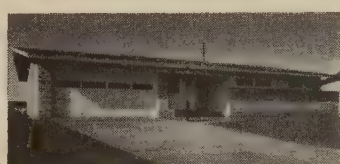
\$112; 1,176 sq. ft. house

4-ply foil over ceiling, 2" wall insulation, 36" overhangs, awnings over east windows

two adults, one child

2-hp. air- and water-cooled unit, ducts under the ceiling

76°



13

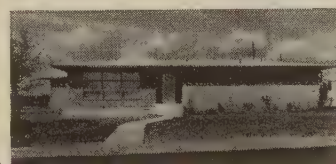
\$113; 1,200 sq. ft. house

6" ceiling insulation, 3" in walls, 30" overhangs, shade screens over glass

two adults, three children

3-hp. unit, cooling tower, one attic duct, the rest under the ceiling

75°-76°



14

\$124; 1,350 sq. ft. house

6" ceiling insulation, 1 1/2" in walls, 30" overhangs, awnings on south-west

two adults, two children

2.7-ton air-cooled unit, ductwork partly in attic, partly below

74°-76°



15

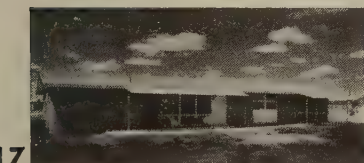
\$127; 1,170 sq. ft. house

4-ply foil over ceiling, 2-ply in walls, white roof, 30"-48" overhangs (most glass of all houses)

two adults, two children

2.8-ton air-cooled unit, ducts under ceiling, high wall outlets

78°



17

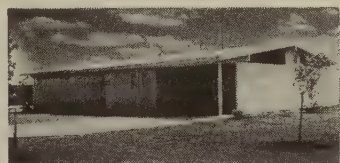
\$130; 1,300 sq. ft. house

aluminum foil under rafters, 4" ceiling insulation, 2" in walls, 36" overhangs, unvented drier

two adults, two children

2-hp. unit, cooling tower, ducts under ceiling, high wall outlets

74°



18

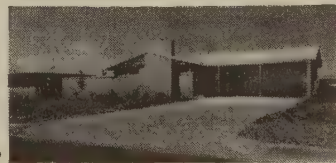
\$132; 1,230 sq. ft. house

4" ceiling insulation, 2" in walls, 36" overhangs, poor orientation, much glass

two adults, two children

2.2-ton air-cooled unit, ducts under ceiling, high wall outlets

74°



19

\$163; 1,468 sq. ft. house

4" ceiling insulation, 3" in walls, 36" overhangs, unvented drier (this is the biggest house)

two adults, four children

2-hp. unit, cooling tower ducts in slab, baseboard outlets

70° (but unit could not hold it)



20

\$172; 1,200 sq. ft. house

4-ply foil over ceiling, 2-ply in walls, 36" overhangs, shade screens on glass but poor orientation

two adults, one child

3-hp. unit, cooling tower, attic ducts

70° day, raised to 80° at night



Five gussets are on front of truss, three on back, as two top drawings show. From one 4' x 8' sheet of sheathing grade plywood can be cut the gussets for two trusses. Bottom drawing shows how the jig blocks are laid out on a table.



Tests to destruction at Purdue and Illinois show this truss is stronger than conventional truss designs.

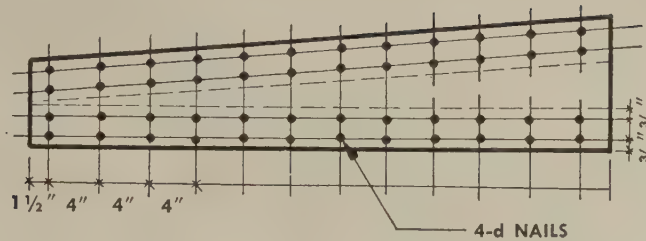
Students at Small Homes Council Short Course watched truss being tested with thousands of pounds of concrete blocks.

H&H staff photo





Mixing glue in this container is boon to production builders. Glue runs out bottom spigot into easily handled spreading machine.



Nail pattern, as shown for one gusset, is carefully worked out for each. 4d nails are used here but in some other plates nails are 6d. Nails are not necessary to the final strength of the truss, are used only to hold truss while casein glue is drying.



Purdue glue spreader has these basic requirements: it is speedy to use, needs no power, is easily adjustable, will not clog, is easy to make, easy to clean. It must be cleaned after use.

for low roofs

A glued truss has just been announced which may be one of the most important technical developments of the year.

It satisfies the need of many builders who are now using roof pitches of 3-in-12 or less and who have been unable to find a truss designed for such roofs. The new truss is strong, easy to make and has other advantages listed below. It may also be cheap. The result of joint research done at Purdue and the University of Illinois, it was announced at the 10th Annual Short Course of the Small Homes Council at Urbana-Champaign.

Different from other trusses, this one has plywood gussets glued and nailed to 2x4s. The glue provides all the strength.

Nine advantages

1. It is designed for 1-in-12, 2-in-12, 3-in-12 and 4-in-12 roof pitches. The 1-in-12 design is actually a "lightened beam."
2. It is as strong as, or stronger than, other trusses tested at the Small Homes Council. Deflection under load is quite small.
3. It is easy to make because a) special equipment is not necessary, although a special glue spreader speeds the work, b) unskilled men can quickly learn the method, and c) materials are readily available. No 2 x 4 chord members need to be cut.
4. The SHC claims it is "one of the most economical types of wood roof construction yet developed."

5. It can be used on spans up to 28' 8"—and possibly to 40'.
6. It can be built at the site or in a shop.
7. It is a component adapted to lumber yard production.
8. Several FHA regional offices have already approved it.
9. It provides a wide (up to 4') overhang at low cost.

Six disadvantages

1. Cost of this particular truss is still theoretical. It is so new it has not yet been put into production. Some builders have tried glued trusses in the past and found them more expensive. One builder estimates this new truss would cost \$13.50 to build.
2. Glue is usually a nuisance to handle.
3. Glue must be allowed to cure for 24 hours, trusses cannot be moved during that critical period.
4. Glue cannot be used if temperature drops below 50°.
5. Wood must be of good quality. If the truss should warp or sag later, it would be quite difficult to repair.
6. The SHC design specifications must be followed exactly. If builders vary the frame design, stresses may be inadequate.

How strong is glue?

Builders need have no worry about the strength of the glued joints. Exhaustive tests at both Purdue and Illinois have revealed that when the trusses are loaded to a breaking point the 2x4s break before anything happens to the joint itself. The new truss will sustain far greater loads than it would ever get in actual use.

Success of the new truss depends on following the rules. Lumber must have bright, clean surfaces so the glue will work well. Grade A casein glue must be used and mixed according to the manufacturer's directions. Glue must be spread properly—better too thick than too thin. Nailing should loosely follow a prescribed pattern. Up to an hour after nailing the glue is somewhat plastic and the truss can be handled and stacked. For 24 hours the trusses must be left strictly alone.

Instruction sheets with full details for building trusses can be purchased at 25¢ each from the Small Homes Council, University of Illinois, Urbana. Builders should specify which roof pitch they want, as sheets are available for 1-in-12 through 4-in-12.

Glued 24' truss built for \$11

Field experience with a 3-in-12 glued truss used in production by Strauss Brothers of Lincoln, Neb. (see H&H, Dec. '53) showed that 24' trusses cost \$11 each. Three men make 40 trusses in an 8-hour day. Strauss used a phenol resin adhesive. More recently this truss has been made with a 2-in-12 pitch. These designs were tested at the University of Nebraska.



G.M.B. houses in Los Angeles which won a design prize at NAHB's Chicago convention are built in small groups (see above) or on isolated lots. About 30 have been finished of six different designs, so

they do not look alike. Two roof framing systems are used, with gables running both long and short way of house. Price includes landscaping, fences, motor courts, carpeting.

Quality houses at \$10.50 a square foot

G. M. B. CORP.: builders
EDWARD H. FICKETT, A.I.A.: architect
LOCATION: Los Angeles County, Calif.

Judges couldn't help but give a prize to these handsome houses.

Here are designs that looked very good to the eye and even better to the pocketbook. The \$10.50 per sq. ft. price shows how a production-minded architect (who often works in the \$10-\$15,000 class) can also design for low construction cost in the \$27,000 and up market. These are California designs and California construction costs but the houses could easily nestle down in the suburbs of Dayton or Memphis.

When the G.M.B. builders came to Architect Ed Fickett they wanted designs suitable for small groups or for isolated lots. They wanted houses appropriate to their \$8,000-\$12,000 lots bulldozed out of land in the few remaining Bel Air canyons or hand-carved from expensive hilltops.

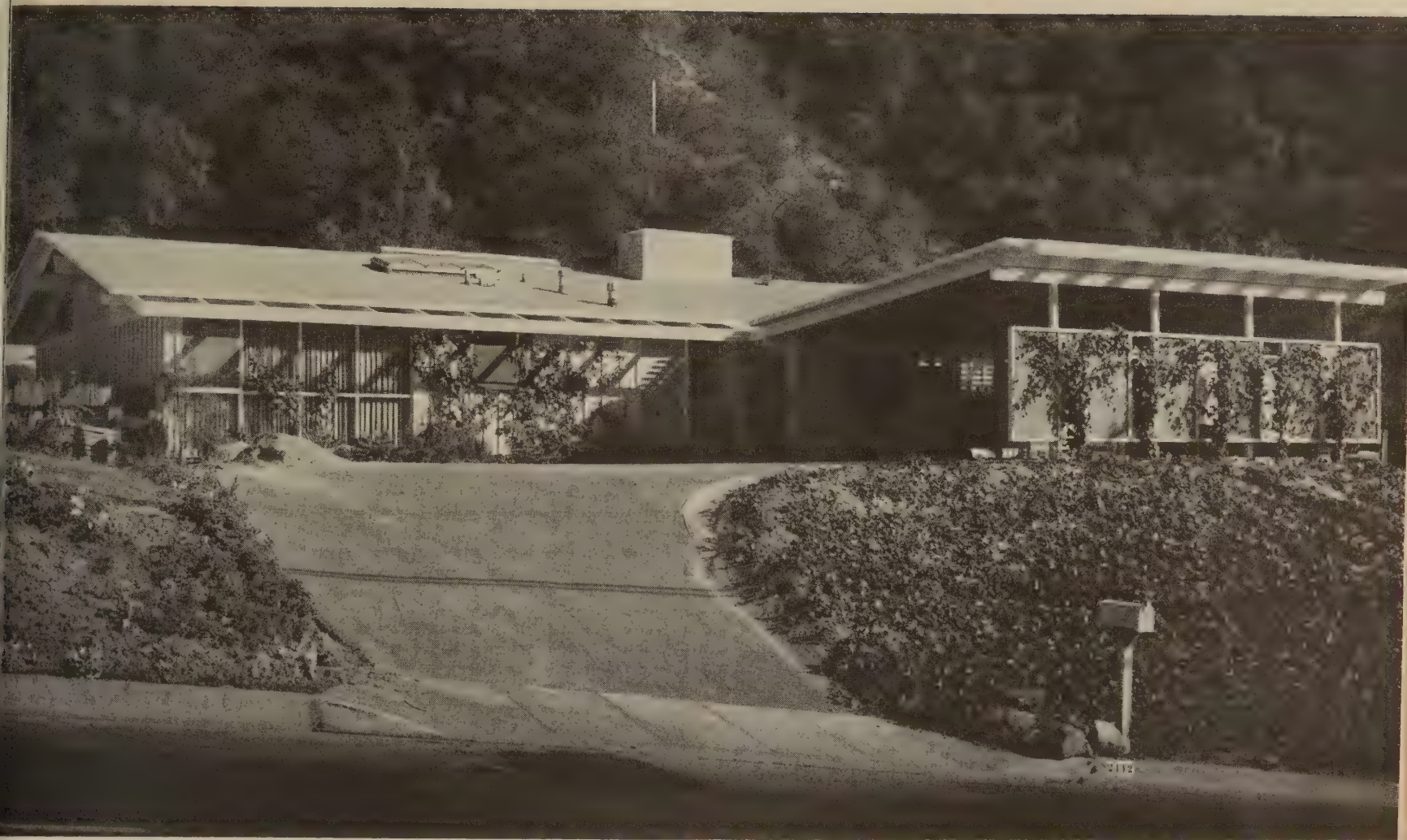
What Fickett gave them is seen in these photographs: 1) contemporary design with no tricks, 2) a basic plan with six variations and two roof treatments, 3) pleasant, spacious interiors that attract buyers and 4) a construction system as thrifty as a Scottish bachelor.

Of the \$27,500 to \$32,500 selling price, less than \$20,000 is for the 1,800 sq. ft. house (plus double garage and large paved motor court). The rest is for land, up to \$1,500 in landscaping and for wall-to-wall carpeting. Houses have radiant heat or forced warm air in the slab. The low house cost results partially from single-wall construction without insulation or double glazing.

Plan and photographs copyright 1954 by

Edward H. Fickett, A.I.A.

Photos: George de Gennaro



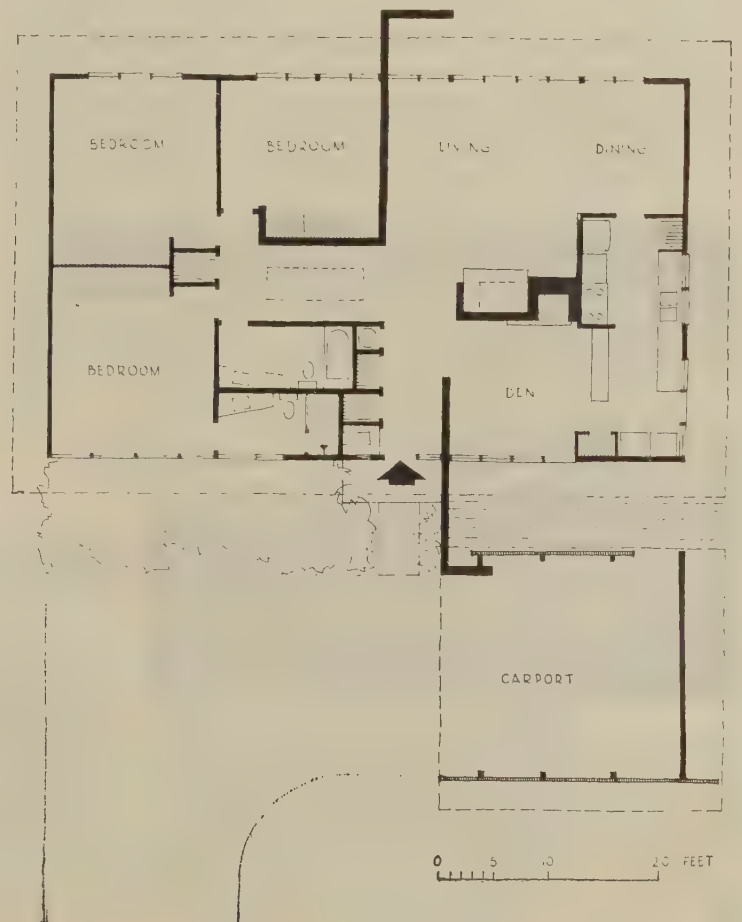
Appropriate for most communities, this pleasant house is a slight modification of basic plan below. A sales feature is living room 27'-7" long oriented

to rear patio. Bedrooms are separated from living-working area by a 15' x 7" skylighted area large enough for chairs, desk or indoor garden.

win NAHB award



Landscaping which costs from \$1,250 to \$1,500 is individually designed to make each house fit into its own surroundings. Many houses are on hilltops or high up along canyon walls with a view of Los Angeles valleys and mountains. All are on slabs.





All-purpose room, next to kitchen, is generally used for dining. This view, looking across skylighted entry to bedrooms, shows the spacious character of the house. Every house has some masonry walls.

Rafters are carried on a post-and-beam structure. Because the bearing posts are on concrete pads, all interior bearing and non-bearing footings have been eliminated. Fickett estimates this saves from \$100 to \$125 a house. Posts and structural beams are exposed inside and out, rafters are plastered over on the interior. Outside walls of redwood or plaster are on conventional studs, are largely nonbearing as are partitions. Every other rafter projects beyond the exterior wall and, depending on the elevation, is covered with 1" x 8" V-joint shiplap sheathing or 2" x 2" lattice work. Where shelter is needed, the lattice is covered with translucent plastic. The roof is three-ply built-up composition covered with ceramic-coated colored rock. The first coat of rock is from $\frac{3}{8}$ " to $\frac{1}{4}$ ", the second is from $\frac{3}{4}$ " to 2". Roof is bounded with a continuous built-in gravel guard and gutter. Window frames are of 2 x 4s specially rabbeted to receive the glazing putty and glass. No wood stops are required. The vertical 2 x 4s in the window walls are spaced from 30" to 36" o.c. A few windows have wood panels inserted in the louver openings instead of glass for better use of interior wall space.



Production methods give quality at low cost



Bedroom windows are usually full height, like these, and have glass louvers for ventilation. Some gable ends are glass, some solid. Bedrooms and living rooms are carpeted.

Living rooms have raised masonry block or slumpstone fireplaces, back of which are barbecues in the den. Plaster ceilings with integral color need no painting.



New blanket protection is outside the studs

A lighter overcoat, well buttoned up, can be warmer than a heavy coat that is not buttoned.

A new king-sized (4'x8') foil-faced half-inch blanket gets rid of the gaps and fishmouths often made by careless workmen working with between-the-studs insulation. Applied outside the studs, it offers continuous vapor sealing and insulation.

To get a construction eye view of this "buttoned-up" insulation, HOUSE & HOME talked to builders, FHA officials and heating contractors in Minneapolis, where it has been tested for three years. Here is what our survey turned up:

1. Speed and economy are major advantages. Builder W. D. Coffman told H&H he quartered his insulating time, saves \$10 to \$12 per house. Another builder says he saves almost \$20 per house.

2. Because the blanket gives unbroken coverage, houses using it are "tighter." Between narrow stud spacings, behind electrical boxes and heating ducts, there is full protection.

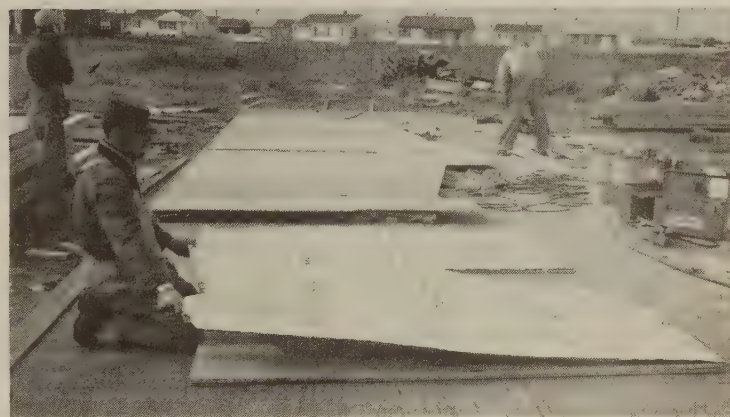
3. Dry-wall nail popping seems to be reduced. Dry-wall sheets are nailed flat against the studs, with no interference from insulation. Several builders in Minneapolis liked this feature especially.

Independent laboratory tests by Prof. Frank B. Rowley, former head of mechanical engineering at the University of Minnesota, indicate that a standard frame wall insulated in this manner has a U factor of .12 (equal to about 2" batt insulation), is an excellent windbreak, and keeps condensation in the wall to a minimum.

Apparently the economies of this insulation are limited to panel-type sheathing or tilt-up wall installations. While FHA has accepted it in Minneapolis, offices in other parts of the country have not yet seen it. National sales begin this month.



23 compressed blankets, enough for an entire house, are shipped in a carton 23 x 15 x 15" (shown, right). Two men stretch a blanket. . . .

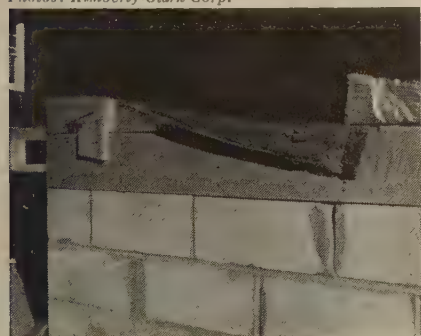


. . . over a sheathing panel on the ground, then staple it, foil face up.



The sheathing is then nailed to the stud exteriors as usual, the insulation compressing to 3/64" under the studs. U factor of this wall: .12.

Photos: Kimberly-Clark Corp.



Oversize blanket fastens down over bottom header, seals joint against the wind.



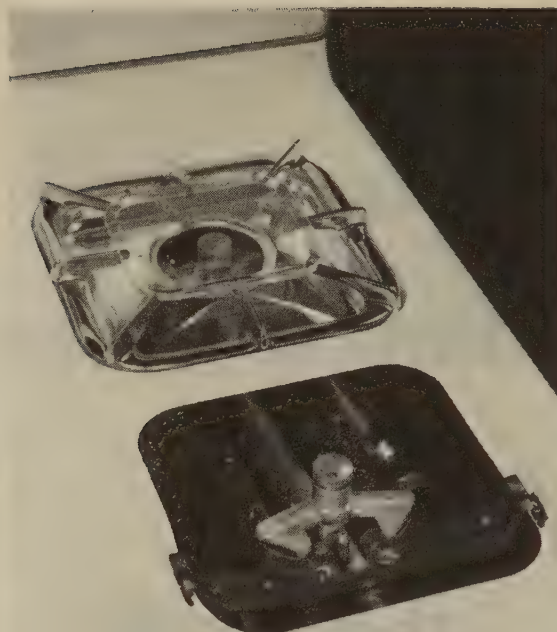
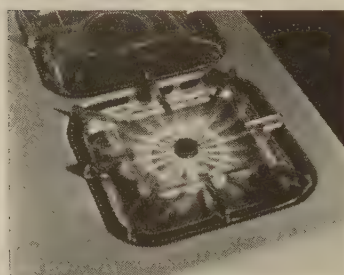
Blanket turns into window openings, acts as calking. Scraps become calking too.



Undisturbed by elements inside, insulation protects perimeter heat openings.

NEW PRODUCTS

"Nickel burner," product of AGA research program, is available to all member-manufacturers. Tempered glass channels heat.



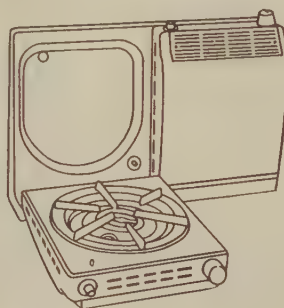
Gas fights back— with improved cooking units



Bead of flame provides instant ignition; each pilot contributes only 50 Btu's to range top.



Automatic shutoff can be set for periods up to 4 hours, has watch-work mechanism.



Foolproof valve shuts off gas when unit is folded against wall. Ignition is electric.

Product research by the gas industry is beginning to pay off.

Newest models make gas cooking as automatic as its competition, improve its performance, and bring the styling up to the standards set by the rest of the appliance industry. Some improvements came from the multimillion-dollar American Gas Association research program, others from individual manufacturer's efforts.

Two of the AGA developments are incorporated in the 1955 Roper: the "nickel burner," and the hypodermic pilot. The first (its name comes from its coin size) is a simple cap of aluminum, fitting into the supply pipe, that directs a scientific pattern of flame against a utensil-supporting glass plate. Even at high flow, the heat is directed at the base of the pan, does not lick up the sides. Instant response from a "keep warm" glow to a high-temperature burst, is another feature of the burner. Tempered glass plates are washable.

The hypodermic pilot (called *Insta-Lite* by Roper) uses only a bead of flame to ignite burners, cuts the Btu input more than half (from 500 Btu's down to 200), thus assuring a cool range top. In the oven, the new pilot raises the temperature only 15° above room temperature, instead of 35°. With this pilot, burners are universal for all types of gas.

Fold the range into the wall

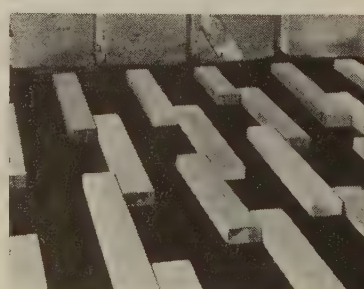
The *Dixie Fold-Away* permits the range area to double as a work surface. Out of use, the

continued on p. 196

Other NEW PRODUCTS in this issue



A top-hung room divider....p. 229



oak floor-on-screeds method....p. 216



patterns for built-ins....p. 236

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ELECTRIC—Fully automatic oven—the first with extra broiler under oven, first with eye-level controls, first with "look-in" window. Variety of cooking tops including griddle.

continued from page 119

Question No. 7 Does FHA now offer the one and only best type of mortgage insurance?

Answer: There is no reason to think so.

Discussion continued

Perhaps a more serious objection is that FHA insists on insuring the entire amount of the mortgage, regardless of whether the lender needs or wants such complete protection, and FHA charges the same insurance premium for the last 10% as on the top 10%.

Among the unfortunate results of this all or nothing method are:

1. FHA insurance is practically boycotted by local lenders and most particularly by the savings and loan societies. This means that the biggest and fastest growing pool of mortgage money cannot be tapped for the 90%-or-higher loans most builders consider necessary for volume selling and volume building. These local lenders, who are ready, willing and able to make 80% loans without insurance, see no reason why they should accept a lower return on this 80% just to make it legal for the builder and the home buyer to borrow an added 10%.

For a local lender a \$9,000 FHA loan is much less profitable than the \$8,000 loan he would gladly make without insurance. And so we have the strange spectacle of savings banks hesitating to go beyond 80% loans in their own communities, preferring to buy FHA mortgages only in distant states where they cannot make the more profitable conventional loans.

2. In times of easy money FHA home owners are tempted to refinance their mortgages if the principal has been paid down enough to permit saving the mortgage insurance charge by taking out a conventional loan.

3. The federal government's liability for the entire amount of all FHA mortgages goes on the books at an astronomical figure out of all proportion to the government's true exposure. This figure is so many times bigger than the FHA reserves that it is easy to see why uninformed or doctrinaire critics leap to the misconception that FHA insurance must involve a multibillion dollar subsidy.



Walter Daran

Lockwood: Why not borrow an idea from Eisenhower's reinsurance plan?

Question No. 8 Could some other type of insurance serve conventional lenders better?

Answer: Here is how they insure the risk up to 95% in England without any government help at all.

In England the building societies which provide almost all the mortgage money can increase their loans to 90% from the standard 80% by insuring only the excess above 80%. Several private assurance companies offer this insurance, largely on the basis of the borrower's credit rating and weekly after-tax income (which should equal the monthly mortgage payment). They accept the lender's property appraisal and charge the home buyer a single premium of 7.5% of the extra 10% (i.e., \$75 to insure an added \$1,000). This premium can be added to the mortgage. A higher premium may be charged if the risk is considered more than normal.

In the case of foreclosure this insurance pays the lender the difference between the actual deficiency (including foreclosure costs and back interest) and what the deficiency would have been if the loan had not exceeded the basic advance (normally 80%).

The guarantee expires when the loan is reduced to 45%.

Nearly 40% of all mortgages taken by the building societies in England are thus insured to permit bigger loans.

The British also have a plan for extending the mortgage to 95% provided the builder leaves part of the purchase price in a builder's reserve. If this scheme could be integrated with the British insurance plan the builder would have to leave only 1% of the sales price in escrow to provide a 20% guarantee for the top 5%. This 1% could be released when all the mortgages in the tract were paid down to 90%, which would take less than two years on a 20-year mortgage. The reserve could be set up in a way that would give the builder the tax advantage of not taking the 1% (which might well be 10% of the profit) into income until it is released to him. *Round Table cont. on p. 168*



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Home Heating & Cooling Dept., Bloomfield, N. J.

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*REG. TRADEMARK OF GENERAL ELECTRIC CO.

continued from page 166

Question No. 9 Just what advantages could these insurance plans offer here?**Answer: Here are seven:**

1. They would enable the savings and loan associations to meet the new FHA competition authorized by the Housing Act of 1954 which, for the first time, lets FHA lenders make bigger loans than conventional lenders on old houses and houses costing more than \$12,000.

2. They would let builders who need high percentage loans to sell their tracts tap the great and fast-growing pool of savings and loan money. This is now impossible, and consequently the savings associations make most of their loans on used houses or new houses selling above \$12,000.

3. They would enable local lenders to help their customers out with high percentage loans without sacrificing their own return on the conventional portion.

4. They would free homebuilding from the threat of money stringency always inherent in the inelastic interest rates on FHA and

VA loans. They would offer lenders a free interest rate alternative at times when the FHA-VA rates are below the market, as in 1951.

5. They would make the whole homebuilding industry less exposed to bureaucratic domination by the FHA underwriting system, which has failed to keep up with our industry's progress. High percentage loans under some adaptation of the British plans could be based on independent appraisals.

6. They would give all lenders a big new inducement to join the Home Loan Bank system if that institution took the lead in offering this kind of risk-portion-only insurance here.

7. They would clearly express the principle of the shared risk, for the buyer and the lender would both have a stake in every house sold with a 90% loan, and so would the builder on every one sold with a 95% loan.

Question No. 10 Why can't these plans be used here without government help?**Answer: Because the US is too big.**

England is a small country, hardly bigger than the single state of New York. It has no problem of distance, no problem of state borders, no problem of varying state laws setting too-low mortgage limits, no problem of state laws making foreclosure too slow and costly. Foreclosure is everywhere quick and cheap.

Photos: Walter Daran



Savage: *The potential of the trade-in market is terrific.*



Moir: *Under the prudent man rule I don't see any reason why the states should not allow 90% or even 100% amortized mortgages without insurance.*



Price: *The government has already started to tighten up, but we won't see it for six months.*

Question No. 11 Why do the homebuilders fight so hard for slower amortization on mortgages?

Answer: Because they believe that the slower the amortization the further the FHA will let them stretch their market.

For years almost everyone has agreed that paying off the mortgage is one of the very best ways to encourage regular monthly savings. It is almost the only way an average family can be sure of 5% on every dollar saved.

Almost everyone has agreed that regular monthly amortization is one of the biggest improvements in mortgage practice in our generation. This amortization lessens the danger of foreclosure in hard times; and the payoffs provide the principal source of money for new mortgages.

But builders believe that FHA has set up its eligibility standards in such a way that millions of buyers are ruled out of the market if they are asked to pay more than a token amortization.

Nobody can buy even the cheapest car unless he is prepared to pay off nearly \$600 the first year at 9.6% interest, and FHA insists that nobody can take out a \$2,000 home improvement loan without paying off nearly \$600 the first year at 9.6% interest. But belief is widespread that FHA strikes 2,000,000 families off its eligibility list if the payoff on a \$10,000 house is stepped up from about one-

fourth the minimum payoff on a \$2,000 car to about half the minimum payoff on a \$2,000 car—from the \$156 required on a 30-year mortgage to the \$300 required on a 20-year mortgage.

As long as that belief prevails how can we expect builders to accept a payoff requirement sufficient to keep up with depreciation?

We recommend that FHA make it clear that its eligibility requirements are based less on the monthly payment than on the price of the house and the true costs of owning it—interest, taxes, maintenance, and depreciation (which under a 30-year mortgage out-runs amortization for the first ten years).

We also recommend that FHA change its eligibility rules to give far more emphasis to maintenance. A \$13,000 quality house using quality products and quality construction may cost less to own than a \$10,000 house of inferior construction and inferior materials. FHA should consider the lower prospective maintenance on the quality house as an offset to its higher prospective interest and taxes in determining the income required to buy it.

Question No. 12 Why is rental housing such a special problem?

Answer: Because government action—federal, state, and local—has made rental housing the most unattractive of all major fields for investment.

Rental housing is constantly subject to the threefold hazard of (1) deteriorating municipal service and the attendant spread of blight; (2) increasing realty taxes which already consume a larger share of gross income than in any other investment; and (3) rent control which denies landlords the right to adjust their prices and their capital to the falling value of the dollar as all other investments can and have. Ten years after the World War II emergency, the continuance of rent control in four states makes housing the last investment to be freed from war-born price fixing, and already HHFA is being instructed to make plans for making rents first price fixed in the event of another war!

Rental housing is the outstanding example of government action making the profit motive work in reverse. Rental housing is attractive for investment only in the slums, where enormous bootleg profits are made possible by the local government's failure to enforce decent housing standards and to police its regulations against overcrowding.

Under all these circumstances it is hardly surprising that private capital is unwilling to put its own money into the erection of new rental housing, hardly surprising that rental housing has shrunk to a trickle of luxury units since Congress changed the Housing Act to stop mortgaging out.

When, as and if government restores the hope of adequate profit to rental housing by 1) assuring better municipal services, 2) enforcing decent living standards on competing properties, and 3) lessening the threat of confiscatory realty taxes and confiscatory rent control, we hope private capital can again be attracted to the construction of new apartments.

In many cities the risk in rental housing investment is further increased by the competition of the "new type of tenancy" in houses bought with little or no down payment.

Round Table continued on page 170

continued from page 169

Question No. 13 How can builders be interested in rental housing?**Answer: Stop taxing them out of the field.**

Venture capital has to keep moving from project to project. It cannot afford to be tied up like investment capital.

That means that apartment house sponsors want to get their capital out as soon as possible after the building is finished and rented, along with their quick gain on the investment. Until they get their money out they cannot use it to tackle another project.

Under today's tax laws a recognized apartment builder cannot take his money out for at least three years without paying ordinary income tax of up to 91%, but a nonprofessional sponsor can take advantage of the 26% capital gains tax at the end of six months. The result of this discrimination is that few professional builders feel they can afford to put their money and experience into apartment construction, so almost the only operators in this field are speculators from other lines of business.

This is one of the big reasons why:

1. Few apartments are being built. Rental housing has lagged far behind for-sale housing and long after the housing shortage disappeared everywhere else it is still critical in big cities like New York and Chicago, where the prime need is for apartments.
2. Most of the few apartments being built

cost more than if they were sponsored by professionals, with resulting higher rents.

One of the primary objectives of any successful rental housing policy should be to get professional builders to tackle the job, and the obvious first step to that end is to stop discriminating against them in the tax they have to pay.

Such a tax change would be all the more effective if FHA would recognize the problem and stop requiring a separate corporation for each FHA rental project. That would allow sponsors the same privilege they now have on non-FHA projects of offsetting some of their profits on units built for sale against accelerated amortization on units built for rent. Even without any change in the present Housing Act, these two changes in tax policy might induce professional builders to sponsor enough apartments to end the big-city housing shortage as they have already ended the shortage everywhere else.

The FHA mortgage regulations further discourage experienced builders from operating under Section 207, for they provide that the mortgage should be based on cost rather than value. In practice that will probably mean that inefficient builders will be able to get bigger mortgages and there will be little incentive to keep costs down.

Question No. 14 What should the government do about housing research?**Answer: It should stop starving the technical section of FHA.**

FHA should be allowed to spend enough of its income for research to keep abreast of technical progress and to give right answers promptly to technical questions.

The first purpose set forth in the preamble to FHA is "to improve housing standards." In recent years, however, FHA has been kept so short of funds that its technical service has lagged behind the industry. Indeed, it has become a brake on the application of improved housing technology.

FHA needs at least \$300,000 a year for research to support and improve its technical decisions, and \$1,000,000 would not be too much. On less than \$1,000,000 where could

the money come from for such essential studies as the \$500,000 research into septic tanks and disposal fields which developed the first good soil saturation test and took the guesswork out of FHA's sewage disposal standards?

In every other industry product research is paid for by the consumer. Other insurance companies appropriate money for research to reduce their risks. What better use could be made of FHA's income than to use a small fraction of its \$150,000,000 a year receipts to pay for research needed to carry out FHA's first purpose and improve the security behind the loans FHA insures?

Round Table continued on page 172

Walter Daran



Walker: . . . Isn't government insurance behind the institution a sounder way than insurance of the individual mortgage?

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continued from page 170

Question No. 15 What stand should our industry take on public housing?**Answer: We should stop making enemies by fighting a small amount of it.**

Public housing has become a relatively minor factor in over-all homebuilding activity and should not be allowed to usurp such a prominent place in the headlines. The 35,000 public housing units the President has asked Congress to approve in each of the next two fiscal years will amount to less than 3% of the new housing total. Many of us believe it is a mistake to build them, but most of us also believe it would be a still greater mistake to make an issue of them, thereby diverting public and Congressional action and attention from more pressing housing needs and problems.

In some European countries the subsidized competition of government housing may have played an important part in nearly destroying private enterprise in homebuilding, but in America today there are few places where our private enterprise industry can rationalize any fear of public housing.

The President has expressed his hope that even this 35,000-unit trickle of public housing can be cut off in two more years as no longer necessary. This hope we share, and we would call his most particular attention to what our industry is doing right now to end the need for more public housing: *by building 500,000 more good new homes this year than America needs to keep pace with population growth, we will enable millions of families to play musical chairs and each move to a better home. The continuation of*

this upgrading will ultimately make it possible for many, many thousands of families to move out of the slums and make it possible to demolish many thousands of sub-standard units.

We have told the government not once but many times that the need for very low rent housing can best be met through good used housing, just as the transportation needs of low-income families are met with good used cars. If we can continue building 500,000 more good homes a year for the replacement market, that will do far more than any trickle of public housing to provide plenty of good homes for everybody. But the public housing issue will always be with us until private enterprise finds a good answer to the problems of big city rental housing and housing available to minority groups.

America is wiping out poverty so fast that all but a few big cities will soon have a large surplus of good used housing available at modest rents for lower-income families. By 1960 most communities will find that their problem will not be how to provide more inexpensive new housing. Their problem will be what to do with the excess of cheap housing already built.

As the need for more new low-rent housing drops off most of us are confident that the responsible leaders of the public housing movement will be only too glad to withdraw their recommendations for the construction of rent-subsidized new units.

Question No. 16 What is the No. 1 problem in making better homes available to minorities?**Answer: Land.**

How can the builders build housing open to minorities and how can the lenders finance it until they can get adequate sites on which to put it?

The big and basic problem is land, and the big and basic failure is the failure of the local communities to make desirable land available. Until the local communities recognize that this is their responsibility and do something effective about it there is no use denouncing the builders and the lenders for not doing more for minority groups. Both the builders, through NAHB, and the lenders, through VHMC, have pledged themselves to a major program of housing open to minorities if they can get suitable sites at an economic price.

One big reason lenders hesitate to put their money into such projects is that any home erected on undesirable land is not an attractive investment. The difficulty in getting land is also a major reason builders have not been more interested in this market, for houses built in a bad location are hard to sell.

Minorities want to be free to live wherever they choose, but market experience has shown in most cities their greatest need is for good housing on land close in and for good housing in the lower price brackets. This makes the land problem all the more difficult in the face of local prejudices and barriers blocking the expansion of the neighborhoods in which they now live.

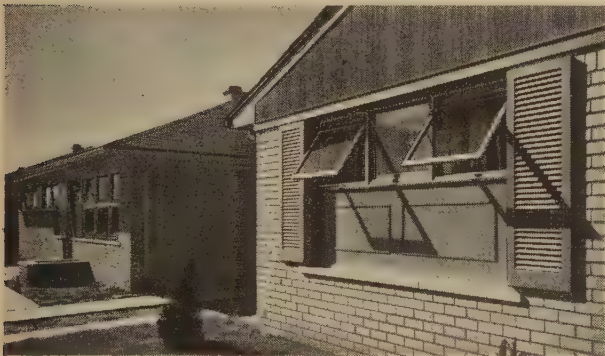
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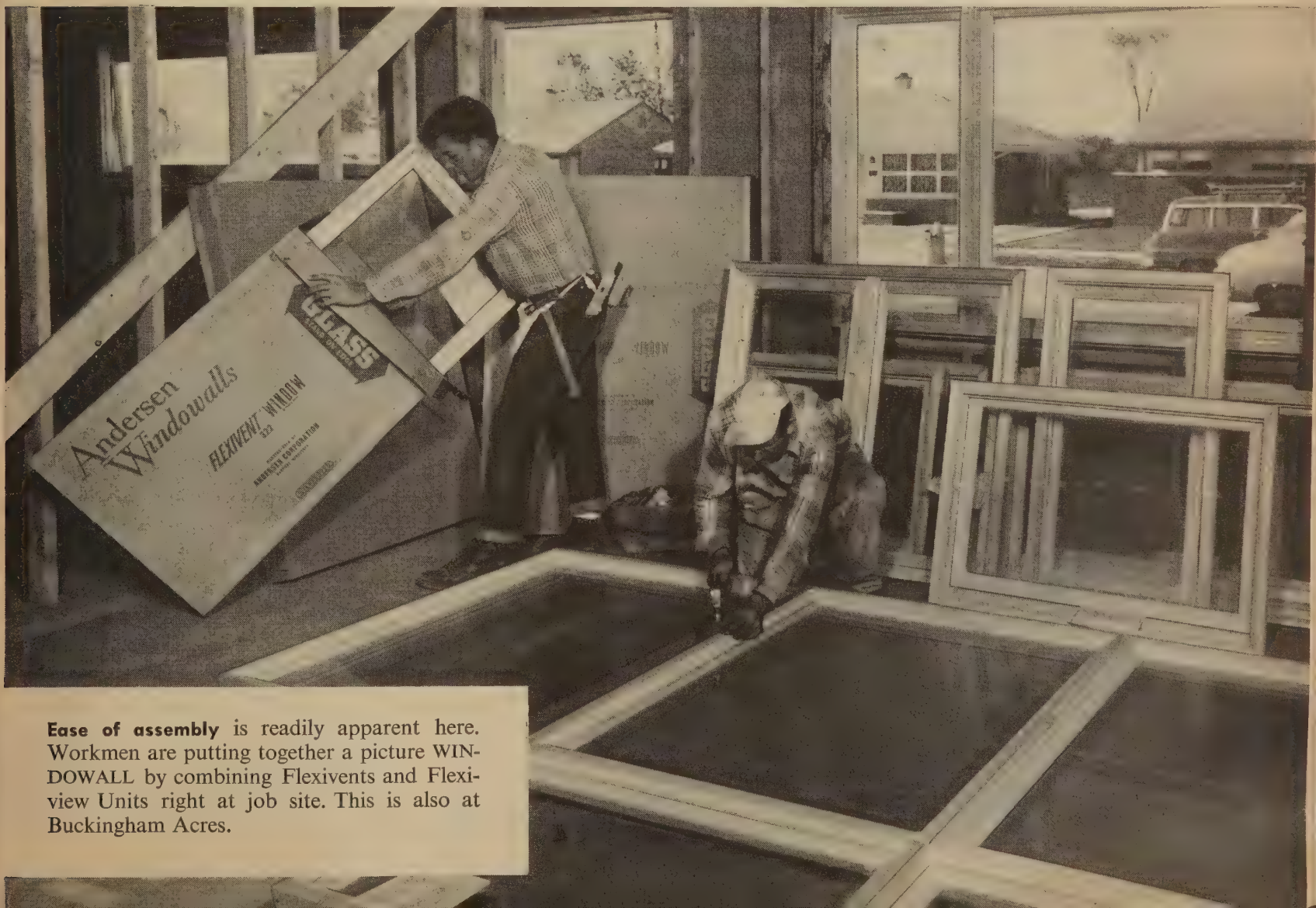


View of finished homes in the Wake-Pratt Buckingham Acres project. All units feature Andersen Flexivents exclusively.

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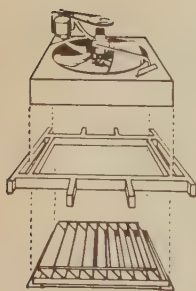


Ease of assembly is readily apparent here. Workmen are putting together a picture WINDOWALL by combining Flexivents and Flexi-view Units right at job site. This is also at Buckingham Acres.



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REVIEWS

Maynard Parker



GARDEN DESIGN ILLUSTRATED. By John A. and Carol L. Grant with 65 photographs, diagrams and plans. University of Washington Press, Seattle. 159 pp. \$5.75

The average citizen, even if he is an architect or builder, has precious little interest in garden design.

The Grants' title is, therefore, unfortunate. What they are discussing and showing in handsome photographs is how to make the piece of land on which a house stands look best and how to make the house itself look best. This is practical and important for anyone who designs or builds houses.

Three ways to plant around a small house:

"1. Use such a large tree that the house appears even smaller, thus dwarfing it and creating quaintness and charm.

"2. Use all small trees and small-scale planting to create the illusion that the house is larger than it actually is.

"3. Use a tree or trees of medium height—25' or 30'—which would allow a small-to-medium-sized house to appear its actual size."

An excellent suggestion for a small lot:

"Where you see the boundaries in a small garden and are conscious of them at all times (because they are sharply defined by an unbroken fence or wall or hedge), you become keenly aware of the smallness of the area. But when the boundaries can be concealed by planting instead of being emphasized, the eye unconsciously tends to assume a continuation of the same type of treatment that it sees in the foreground. Combine this trick with a large-scale planting and you create the illusion that the tiny garden is a small corner of a large estate."

Among rules for foundation planting:

"The foundation planting should be one continuous bed, if for no other reason than easy maintenance. Generally speaking, the bed should be wide at the corners and narrow in front of windows.

"The height of the planting should be from one and one-half to three times the width of the bed...."

Most of the plantings shown are of North-western material but the design principles in *Garden Design* are anything but regional.

THE CHANGING AMERICAN MARKET. By the editors of FORTUNE. Hanover House, 575 Madison Ave., New York City. 304 pp. \$4.50

The first rule of salesmanship is "know your customer." And the American customer for all products—including housing—has drastically changed in the past generation. Eighteen months of research and over \$100,000 went into this searching study of the US consumer, who he is, what he earns, what he wants to buy.

One important finding: the \$4,000-\$7,000 income group, the merchant builder's best market, has trebled since 1929, and is still increasing. These people have more spendable income, and they have more children. All of which adds up to what FORTUNE calls "the insatiable market for housing."

The buoyant truth is that even after the 1946-1954 production, the need for housing is still much greater than anyone thought it would be. There remains a basic demand of 800,000 units for new family formation, 300,000 for demolition, plus an "improvement factor" based on our rising standard of living.

And this market is going to go to the alert, efficient builder, who knows methods, materials, and costs. The editors reason: "The coming years will be hard on the inefficient builders and probably on the little ones. The mass builders haven't increased their share of the market very much recently, but the odds are certainly now in their favor."

What about blight?

The roadblock to urban rehabilitation is accurately spotted:

"When a car has run its life it can easily be driven away and scrapped. But a house that nobody wants cannot ordinarily be demolished so easily. Not being readily movable, it stands empty, a burden on the community.

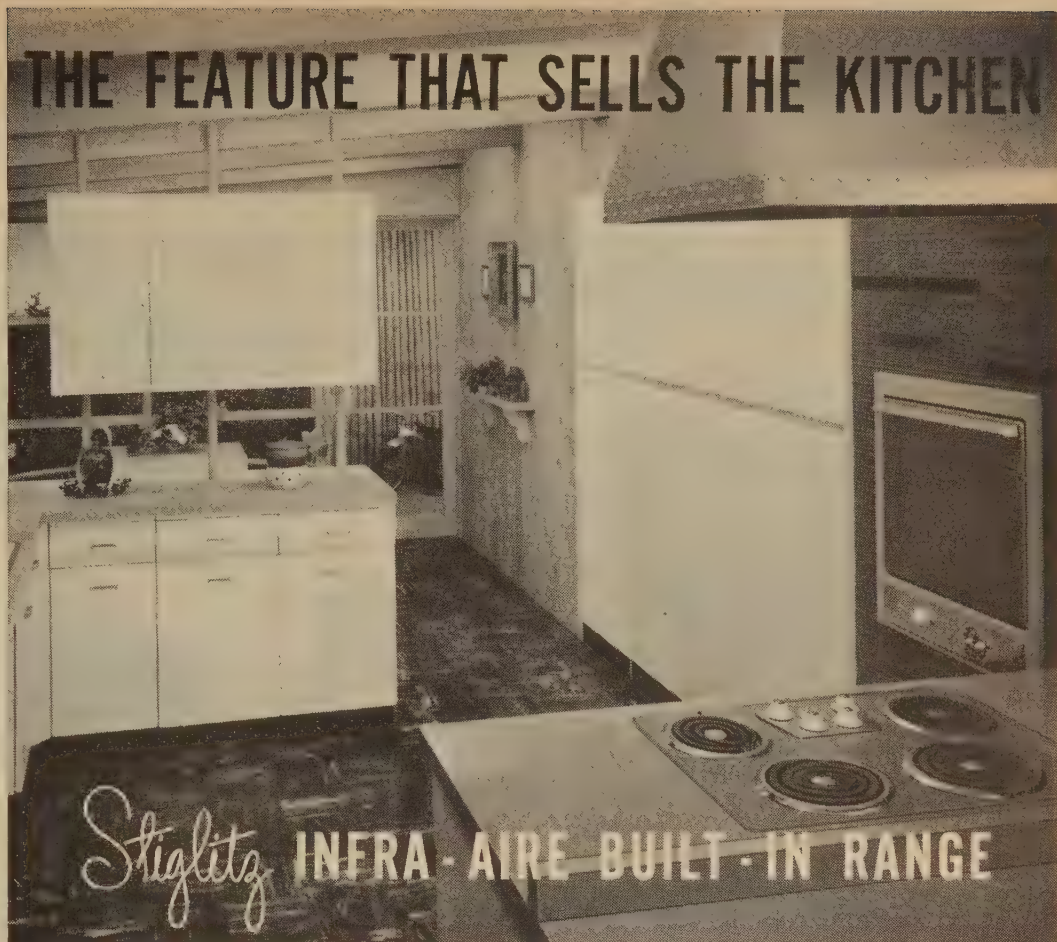
"City governments and industry must jointly take inventory, replace and plan new neighborhoods, undertake programs to help [and in some cases, force] owners to maintain homes to minimum standards or destroy them; they must set up courts to enforce new ordinances, enforce proper land utilization; and where necessary, they must subsidize housing locally."

What should be housing's goal?

The book sets a high, but attainable target for the homebuilders:

"The building industry can and should aim not only to take care of the 800,000 or more new households that will be formed each year. It can and should aim to [give] every American who works for a living a house that is as much a credit to the productivity of America as the car he drives, or the office or factory where he earns his living."

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RUBEROID

THE RUBEROID
CO.
New York, N. Y.

insulation improvement in 16 years!

new improved

FIBERGLAS

BUILDING INSULATION

Your homes will be easier to build—easier to sell—now that new improved Fiberglas* Building Insulation is here!

EASIER TO BUILD because the new Fiberglas Building Insulation is easier to handle. It's made with finer, longer fibers of glass through a process developed after years of Owens-Corning Fiberglas research. It has improved handleability . . . is a cinch to cut with hand-knife or scissors.

EASIER TO SELL because the finer, smoother, longer fibers mean vastly increased insulating efficiency. And right now, your own prospects are learning all about it—through powerful four-color advertisements in national magazines, through con-

vincing demonstrations over network TV. They'll be looking for the new Fiberglas Insulation in the homes they buy.

Remember, this is the same fine Fiberglas Insulation you've been using—only better! Won't rot, decay, pack down. Has a self-contained vapor barrier . . . strong nailing flange with time-saving inch and foot markings. Available in roll and batt blankets.

So—get set for the coming building season! Plan to use and promote the new improved Fiberglas Building Insulation in *all* your homes this year. Order today from your distributor, wholesaler or building supply dealer. Owens-Corning Fiberglas Corporation, Toledo 1, Ohio. Dept. 67-C.

see the difference for yourself!

Ask your Fiberglas supplier for a sample of the new improved Fiberglas Building Insulation . . . and you'll see for yourself—far better than words can ever explain—why it's the greatest insulation improvement in 16 years!





The new silhouette
in kitchen styling!

KITCHEN MAID'S NEW SHADOW-LINE

wins sweeping acclaim of nation's builders!

Shadow-Line by Kitchen Maid... the dominant new look in kitchens... is being universally hailed by America's leading project and custom builders as the most exciting style motif of recent years! This lovely new kitchen silhouette brings the warm, rich appeal of Kitchen Maid's Nutmeg Natural finish into broader definition, brings the *magnetic sell-appeal* of natural wood cabinets to its fullest expression. It's new magic for the homes you build... another reason why Kitchen Maid Kitchens are first with builders, first with buyers!



In the Shadow-Line motif, door edges are cut on an inverted bevel, giving a clean solid plane to front surfaces.

New Look, New Finish, New Features

enthusiastically received at NAHB Show!

"Best of the show", agreed hundreds of builders, architects and dealers who visited Kitchen Maid, saw the Shadow-Line plus Kitchen Maid's 1955 features, including new corner cabinets with revolving shelves... built-in planning desk without sacrificing counter space... sit-down sink cabinets... and beautiful Nutmeg finish.



Jack A. Mills —
Mills & Son, Elmwood
Park, Illinois
"Exceptionally beautiful and dignified workmanship... a fine product you could live with all your life."



Elmer Vorhof, Milton
Duenke, Vorhof-Duenke,
St. Louis, Mo.
"We have had very successful experience with Kitchen Maid in 700 of our Hathaway homes... look for this new design to enhance the saleability of our 1955 homes."



Joseph Siegler —
A. Siegler and Sons,
Cleveland, Ohio
"Southgate are good homes, but Kitchen Maid units are the reason why they're the best homes."



David D. Bohannon —
Past President, NAHB.
"Very attractive and appealing... lends itself to the California living we like so well."



Jack Sargeant —
Sargeant Bldgs., Inc.,
Topeka, Kansas
"Best wood cabinet I ever saw... especially like your Nutmeg, outstanding accessories."

other Kitchen Maid differences
that help you sell more homes!

1. Built-in Laundry Aids... ironing board, drying rack, portable hamper with convenient storage for laundry supplies—hamper doubles as convenient serving cart
2. Quiet, easy-sliding, lifetime aluminum drawers... oil-impregnated hardwood guides

3. Fine furniture-type construction... hardwood throughout, dowel joinery for greater strength
4. Cabinets for popular built-in oven and cook top units
5. Choice of Nutmeg Natural, lovely colors or white finish

Kitchen Maid Corporation
453 Snowden Street, Andrews, Indiana
Please send new booklet containing 10 practical kitchens with details of this complete Kitchen Maid line.
I am an ☐ Architect ☐ Builder ☐ Dealer

Name _____
Street _____
City _____ State _____



RESEARCH

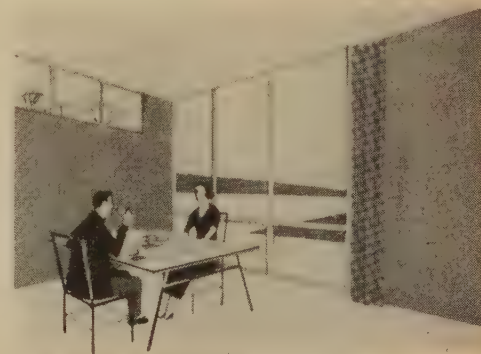
HOME SAFETY PRINCIPLES. NAHB Research Institute, 1028 Connecticut Ave., N.W., Washington 6, D.C., in co-operation with The National Safety Council. 8 pp. 8 1/2" x 11". Single copies free, 4¢ ea. in quantity

Is your house safe? NAHB's check list of dangerous conditions moves from site to house to components, ticking off those common errors that increase the chances of accidents to the occupants.

Is your terracing gently graded? Have you enough electrical outlets? A grab bar for your tub? Good lighting at front and rear steps? These and 59 other safety questions are asked. If your "Yes" answers total 50 or more, NAHB and the Safety Council grant that you have built relative freedom from danger into your house. If not, they suggest that you take another look at your planning.

WINDOW PLANNING PRINCIPLES. Small Homes Council, University of Illinois, Urbana, Ill. 8 pp. 8 1/2" x 11"

Placement and use of windows usually demand compromise. Maximum daylighting may well be at odds with placement and size for ventilation, or for the enjoyment of a view. In this paper SHC suggests some principles for melding the varying demands of daylight, ventilation, view and appearance.



Some principles:

1. Plan glass area to be over 20% of room floor area; ventilation more than 10%.
2. Group window openings for best distribution of light.
3. Place windows as high in the wall as possible.
4. Avoid corner or bay windows.
5. Locate windows for the best movement of air a) across the room, and b) within the sitting and standing levels.
6. Determine sill heights through room use and furniture arrangement.
7. Make both house and ventilation openings take advantage of prevailing winds.
8. Use windows to add to the continuity of each elevation, rather than allow the principal glass and wall areas to be unrelated.

As always with SHC material, the chief findings are cleverly and clearly illustrated with first-class drawings.

OF TOMORROW"

for developing practical kitchen ideas



Here's how Frigidaire will be helping you sell the room that sells the house

The BIG ROOM today in the merchandising and selling of new homes is the kitchen. It's an exciting new "revolution" in home planning . . . and Frigidaire has been leading the way with an entirely new concept of kitchen research—first with the 1954 Kitchen of Tomorrow—and now with an even more exciting 1955 version that's completely new.

Out of Kitchen of Tomorrow thinking have already come many new and exciting ideas. Ideas that Frigidaire and General Motors' engineers have made practical for inclusion in builders' plans for today's homes. Ideas like the new built-in cooking units . . . new built-in ovens . . . automatic dishwashers . . . and the new Cold Pantry

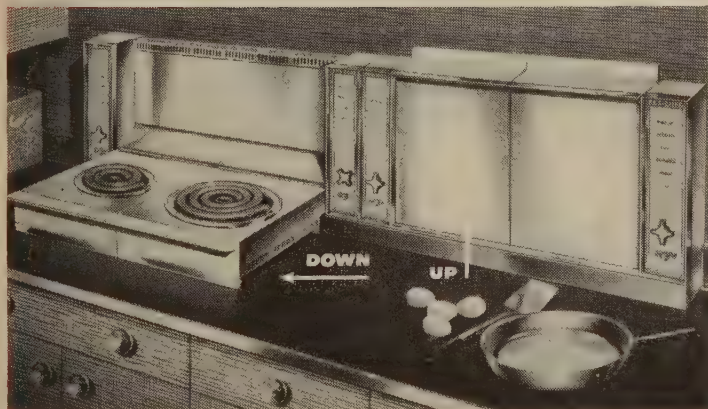
Refrigerator-Food Freezer.

And this is only the beginning. Frigidaire has embarked upon an extensive new builder program. It's a two-pronged program geared to bring out glamorous new products to add sales appeal to kitchens; and to interpret the latest ideas and plans of leading architects, decorators and designers into a reality.

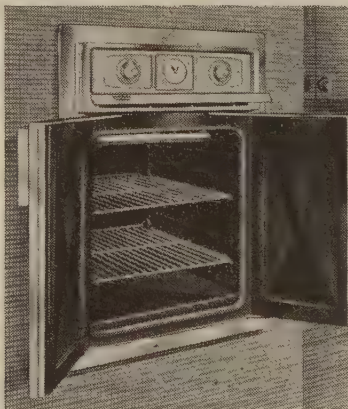
You'll get new slants on kitchen design! You'll get the latest news about glamor in kitchens. You'll get practical ideas about building kitchens at low cost. You'll get more and more Kitchen of Tomorrow thinking! You'll get the benefits of cooperative effort and practical planning by top men in the business!

The Kitchen of Tomorrow will be demonstrated at the General Motors Motorama in Los Angeles March 5-13; San Francisco March 26-April 3 and in Boston April 23-May 1.

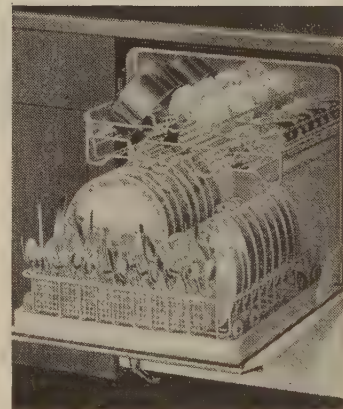
Here, from "Kitchen of Tomorrow" thinking are Frigidaire Appliances now ready for your new homes



New Frigidaire "Fold-Back" Cooking Units pull down individually for surface cooking. Lift back up and unit turns off automatically. Saves work surface. Each section of one 6" and one 8" separately controlled Radiantube unit needs only a 30" wall surface. Easily attached to counter. Stainless steel, plastic trim.



New Frigidaire Imperial Wall Oven with exclusive new space-saving "French Doors". Same giant size, same automatic features of Frigidaire's finest ranges.



New Frigidaire Dishwasher with "Turbo Spray" Action makes 5-minute dishwashing come true. Lifetime Porcelain finish; choice of colors.



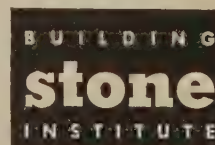
Glover Johns Residence, Austin, Texas.
George L. Walling, Architect.
Photo by: Dewey G. Mears.

stone . . . IT TAKES SO LITTLE TO MAKE A BUILDING LOOK DISTINGUISHED

High fashion may change with the seasons, but there are certain basic concepts of style and good taste which wind like a golden thread through every honest architectural concept. STONE is, and always has been, a fluid medium for these concepts. It can be used with the knowledge that its beauty enhances and will endure. A little stone gives a lot of distinction.

*For additional information about STONE,
its variety, characteristics, availability or uses,
write the Building STONE Institute.*

BUILDING STONE INSTITUTE, 40 EAST 56th STREET, INDIANAPOLIS, INDIANA



NEW PRODUCTS *continued from p. 164*

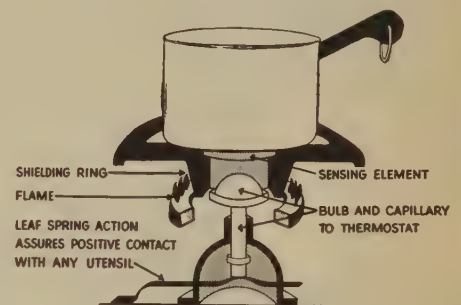
For further details, check numbered coupon, p. 276

burners, in hinged, self-contained units, are tilted against the wall, leaving the counter top free for working. When swung into place, fuel flow begins, and the unit is ready to use.

Folding up the range unit closes a rotary valve that has AGA approval as safe and foolproof. A metal hood at the top of the burner diverts any residual heat away from the wall. Either in cooking or noncooking, all controls and burners are out of the small child's reach. Burners come only in pairs.

Thermostatic control

Florence's *Governess*, incorporated into one central burner on their newest models, is a thermostatic device that holds the tempera-



ture of the cooking utensil to a predetermined temperature. Fitting snugly against the bottom of the pan, the *Governess* varies the gas flame to hold a temperature within a few degrees. This feature will be most useful in deep-fat frying or griddle cooking.

The thermostat is protected from the actual flame by a metal barrier, and works on the expansion and contraction of a fluid within a closed tube.

Automatic shutoff

The first mechanically actuated timer for gas ranges is now being applied to top-of-the-stove cooking as well as ovens. Called the *Potwatcher*, the control works on a watch mechanism that rotates a shutoff valve down an inclined plane until it drops into place at the preset interval, shutting off the gas flow. This permits foods to be started cooking on the top of the stove, then ignored until the cooking cycle is completed. When desired, the burner can be adjusted manually, without setting the timer.

With the exception of the *Fold-Away*, a complete unit, the new features described above are not sold separately, but only as components of standard range units. So far, they have been incorporated only into the higher priced lines, but public acceptance will undoubtedly bring wider use.

Manufacturers:

Nickel burner and Insta-Lite
Geo. D. Roper Corp., Rockford, Ill.

Fold-Away
Dixie Products, Inc., Cleveland, Tenn.

Governess
Florence Stove Co.
1459 Merchandise Mart, Chicago, Ill.

Potwatcher
Robertshaw-Fulton Controls, Greensburg, Pa.

continued on p. 208

THESE DENVER, COLORADO, BUILDERS BELIEVE

"All the Comforts of Home"

**SHOULD
INCLUDE *FASCO***

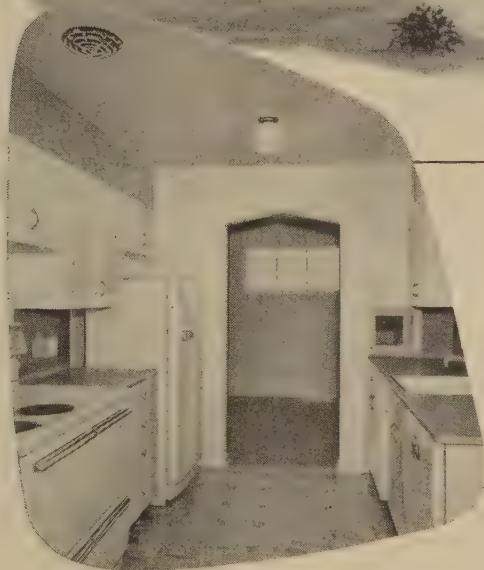
VENTILATING FANS



Donald E. Harmelink, Partner
Harmelink Bros.
Denver, Colorado



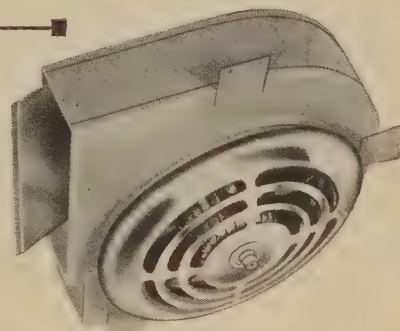
Robert J. Harmelink, Partner
Harmelink Bros.
Denver, Colorado



The Harmelink Bros. use FASCO Ventilating Fans in kitchen and bath in their new homes in Denver, Colorado. The brick home pictured above, which attracted considerable interest during National Home Week in Denver, is representative of the high quality stressed by Harmelink Bros.

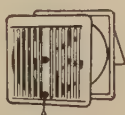
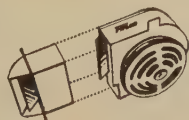
"We try to give people what they're looking for at a price that makes each of our homes an outstanding buy. A lot of people are looking for FASCO ventilation in their new homes. FASCO has a complete line that takes care of any ventilating problem we may have. And there are no service call backs with FASCO. We can install them and know they're going to do a good job for many, many years."

Donald E. Harmelink and Robert J. Harmelink



MODEL 1021 "CEIL-N-WALL" DELUXE
For Large and Medium Sized Kitchens

This FASCO Kitchen Ventilating Fan is adaptable for a wide range of installations—inside wall above stove—thru cabinets—in ceiling. Housing 3¼" thick. Engineered for most difficult type of exhausting—by pressure, thru ducts. New FASCO Turbo-Radial Impeller develops pressures unobtainable by ordinary fan blades. 10" impeller, 530 C.F.M.



MANUFACTURERS OF
THE ONE COMPLETE LINE
OF VENTILATING FANS

FASCO

FASCO INDUSTRIES, INC.
335 Augusta Street
Rochester 2, N. Y.



PREWAY

Wallchef

Gas and Electric Bilt-Ins

Center of interest in today's modern kitchen is the built-in range . . . and PREWAY'S dynamic gas and electric Wallchef and Counterchef make your functional kitchens better.

A glance will tell you they're styled to thrill women — the most beautiful gas and electric built-ins you've ever seen. A close look establishes PREWAY's outstanding performance presentation . . . full-sized ovens and broiler units with eye-level oven controls. No more stooping or bending! You'll like the clear-view glass oven window set in lustrous stainless steel with a push-button light that

illuminates the interior without need for opening the door.

The Counterchef is equally exciting to women. Surface units are available in clusters of two, four, six or eight as wanted. And every burner unit has an exclusive lift-out spill-over tray that eliminates messy drip pans.

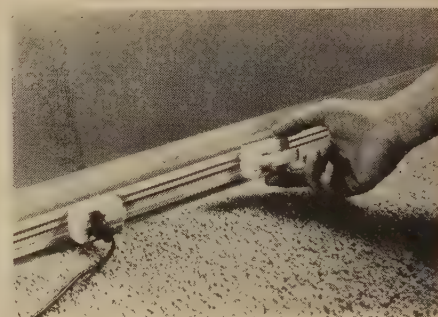
If anything can sell a kitchen, the flexibility of Wallchef and Counterchef Bilt-Ins certainly can — for there is no price objection to stand in the way. Every home may have this happy installation because it goes in fast and easy, and costs no more than a conventional modern range. Behind these two units is a multi-million dollar company which has been making high-quality appliances since 1923. The full facts are yours for the asking. Phone, wire or write today for the name of the distributor in your area.

PREWAY Inc.

2355 Second Street North, Wisconsin Rapids, Wisconsin

NEW PRODUCTS *continued from p. 196*

For further details, check numbered coupon, p. 276



b. **WIRING STRIP** provides a continuous outlet on any wall, can bend around corners

Outlets can follow electrical needs around the room with Bulldog Electric's *Electrostrip*, a rigid vinyl plastic band with integral wiring.

Flexible enough to be hand molded around corners or obstructions, the strip has channels that hold snap-in outlets. Depressing a lever locks the outlets into place anywhere along the strip length, and lifting the lever frees the outlet so that it can be removed to another location.

Wiring is completely concealed within the edges of the plastic extrusion, and the Underwriters' Laboratories approval indicates complete safety. *Electrostrip* may be recessed into baseboards, flush-mounted, even connected to existing outlets. It could also be mounted above kitchen work surfaces to provide for appliances. End caps, elbows and tees give complete versatility. A plastic junction box with a back knock-out permits easy connection to main circuits.

Snap-in outlets are fused with 6 amp., auto-type fuses as a protection against overloading



Appliance needs in kitchen are met by electrostrip along the length of work surface. Outlets can be moved.

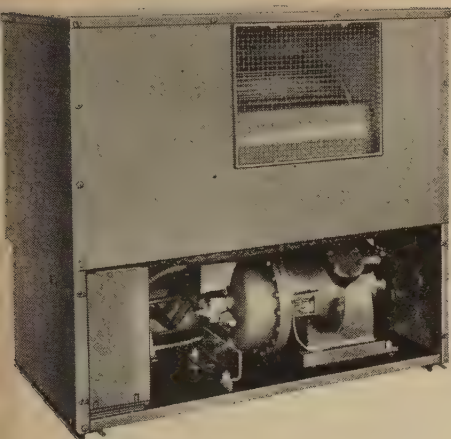
the 20 amp. rated capacity of the *Electrostrip* circuit. One outlet will be provided for every 5'-7½' of wall length, but extra outlets may be added up to the fused capacity of the strip. The strip and fittings are in a neutral ivory color only.

Price: \$1.10-\$1.25 per ft.; outlets, \$1 each

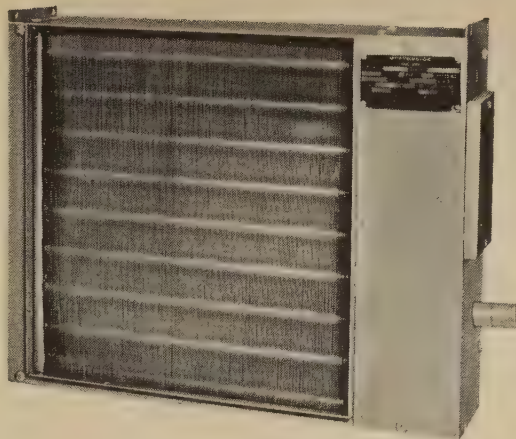
Manufacturer: Bulldog Electric Products Co.
Electrostrip Div.
7610 Joseph Campau Ave.
Detroit 32, Mich.

continued on p. 216

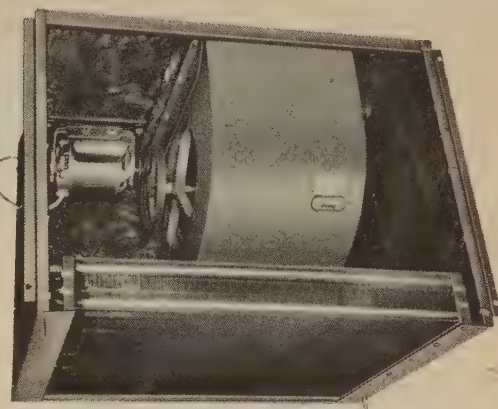
Meet 3 newcomers in Worthington's air-cooled line!



WORTHINGTON'S BRAND-NEW AIR-COOLED CONDENSING UNIT. Install it anywhere—outdoors, breezeway, garage, basement. *All electric—no water used.* It'll do an efficient job in even the hottest weather because of powerful condenser air-blowers. 2-, 3- and 5-hp.

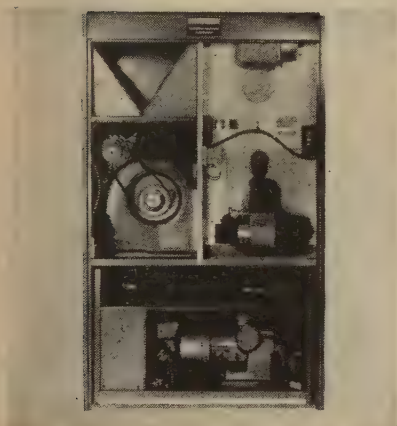


COMPANION COOLING COILS. Worthington's new broad line of Remote Duct Cooling Coils provides you with a wide range of capacities and sizes that will simplify your application and installation problems. Light-weight, easy-to-install unit is available in 2-, 3- and 5-ton capacities.

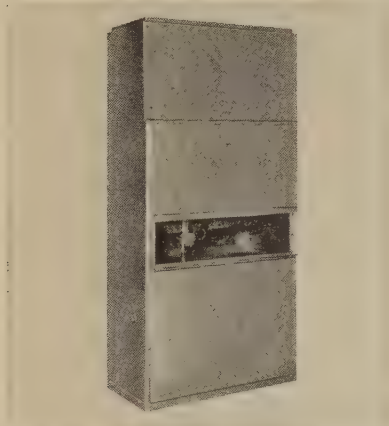


AIR-COOLED CONDENSERS. These new Worthington units feature over-sized condenser coils; powerful, quiet condenser air-blowers; continuous-duty blower motors; weather-proof cabinet. They convert water-cooled air conditioning units to air-cooled operation. 2-, 3- and 5-ton capacities.

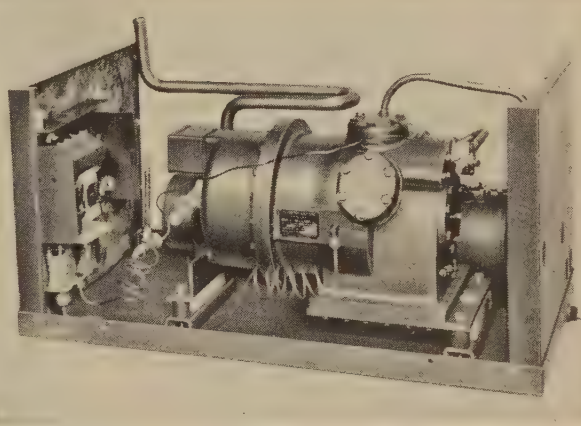
Look at these other Worthington residential units!



WORTHINGTON'S COMPACT YEAR-ROUND UNIT measures only 29" deep by 42" wide by 70" high. Ceramic-coated heat exchanger, gas or oil-firing. Completely automatic summer and winter operation.



"ADD-ON" RESIDENTIAL COOLING UNITS convert present warm air furnaces to year-round cooling and heating. When additional air delivery is needed, fan section shown on top of unit is used. 3- and 5-ton sizes.



WATER-COOLED CONDENSING UNITS. Worthington's packaged water-cooled condensing unit fits anywhere—closet, basement, attic, even in the garage. Compressor, condenser, and controls come in one compact cabinet. Use it with Worthington's Remote Duct Cooling Coil, for existing homes or new construction. Available in 3- and 5-ton capacities.



GAS-FIRED BOILER. Sectional cast iron, AGA approved for all gases. Enclosed in handsome cabinet. Readily suited for use with heating coils in packaged units for year-round application. 54,000 to 378,000 BTU input.

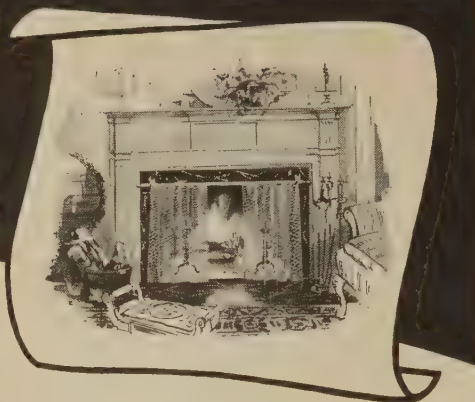
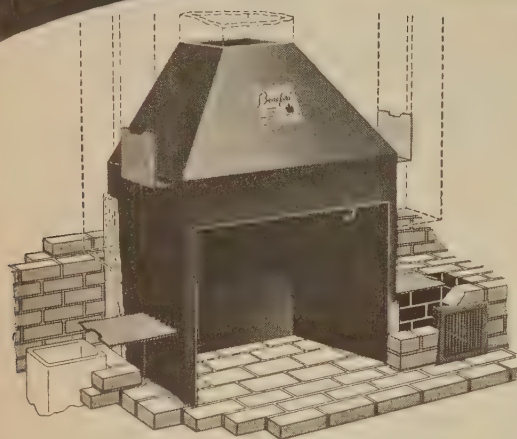
Want to know more about Worthington's complete line of residential air conditioning equipment? Contact your nearest Worthington dealer or write to Worthington Corporation, Air Conditioning and Refrigeration Division, Section A.4.59-H, Harrison, N. J.

WORTHINGTON



Climate Engineers to Industry, Business and the Home

the extra sales appeal of the **OPEN FIREPLACE**
can now be added to
LOWER PRICED HOMES
with *Benefire*... the
COMPLETE FIREPLACE FORM



WITH *Benefire*® THE WHOLE FIREPLACE
COSTS LESS . . . OPENS A WIDE NEW
MARKET IN LOWER PRICED HOMES

Now you can incorporate your customer's "dream" fireplace even in your moderate priced homes. *Benefire* is the complete fireplace form . . . saves up to a ton of costly masonry on each fireplace . . . builds a perfect fireplace quicker and easier . . . New throat damper really closes tight, without packing . . . New "Ductops" make duct work cheaper than laying solid masonry . . . Let's look at some of the new features that now put an open fireplace within the reach of all your customers.

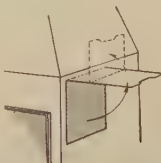
ARE YOU TAKING ADVANTAGE OF THESE TIME AND MONEY SAVING FEATURES?

1. Adjustable Flue Connection . . . where needed, flue connection enlarges to support larger flue tile.
2. Extra Large Smoke Dome . . . gives gradual funneling from throat all the way to the flue.
3. New Tight-Seal Throat Damper . . . seats tightly all around without packing.
4. Exact Draft Control . . . Intermediate settings control excess heat loss, in a simple Ratchet or popular outside "Rotary". Neither relies on short-lived springs or friction.
5. Well Proportioned Opening . . . Depth and height are carefully related to gain broadest view of fire, most radiant heat and fuel capacity.
6. Square-Sides . . . gives larger heating chambers, easier brick lay-up, saves masonry.
7. All-Around Sealing Flange . . . gives quick, permanent leak-seal around hearth as well as front.
8. Air Inlets and Outlets . . . conveniently located, "Ductops" lift to form difficult part of ductwork.
9. Firebox Walls . . . back and side walls angled for greatest heat. Heavy boiler plate . . . double welded for greater than "one-piece" strength.
10. Extra Long Baffles . . . in heating chambers, conduct incoming cool air to heat center at back wall.

See your LOCAL BENNETT SUPPLIER

for full details and low prices on the new mason designed *Benefire* Unit, and also the complete line of dampers, ash dumps, grilles, grates, lintels, etc.

Write to 355 Call Street for complete new catalog.



THE COMPLETE FORM FROM HEARTH TO FLUE... *Benefire* is a complete form—all around and right up to the flue. Just set the unit on the hearth, place the flue on the unit, and lay up the masonry.

NEW SQUARE FORM . . . Square sides on the new *Benefire* eliminates slow, troublesome diagonal courses. Incidentally the bigger air chambers of the new *Benefire* occupy more space, save masonry in addition to giving larger heating capacity. The average size now "displaces" 116 bricks—half a ton of masonry.

NEW "DUCTOPS" . . . Here is a real time saver. Just bend up the "knock-outs" to the required angle and you have a form for the troublesome part of the duct work. Now with "Ductops" it's actually faster and cheaper to build ducts than to lay solid masonry. If you run the outlets straight up and have the grilles near the ceiling (where they look and work best) you can save up to another half-ton of masonry!

BENNETT - IRELAND, INC.

Chartered in 1906
NORWICH, NEW YORK

NEW PRODUCTS *continued from p. 208*

For further details, check numbered coupon, p. 276

c. OAK FLOORS laid on staggered screeds eliminate subflooring

Manufacturers of oak flooring, fighting against the invasion of resilient tiles, have come up with a new installation system for concrete slabs that does away with the usual subflooring and is accepted by FHA.

Basis of the new method is the staggering of the mastic embedded 2" x 4" screeds to provide enough nailing surface for the finish flooring. The asphaltic compound is first troweled onto the slab, then the overlapping random-length screeds are laid. Between screeds and base plates, the installer leaves 1", for normal expansion of finish floor.



Hot mastic is applied over entire surface of slab to depth of 3/32".



Staggered screeds are first treated with wood preservative, then embedded in mastic.



Flooring must bear on at least two screeds. All joints need not bear over screeds.

Where dry-wall construction is used, the flooring is usually laid first, but if walls are plastered, they must be permitted to dry out before the floor installation.

An illustrated pamphlet describing the new method has just been published and is available to any builder.

Manufacturer: National Oak Flooring
Mfrs. Assn.
814 Sterick Bldg.
Memphis 3, Tenn.

continued on p. 225

fabrow flexible fenestration

AVAILABLE NOW AT

Alabama, Montgomery
Pitman Brothers, Inc.
156-160 Commerce Street

Connecticut, Hartford
State Glass Company
181 Walnut Street

Illinois, Chicago 18
Robert Arnold Company
3420 W. Irving Park Road

Illinois, Danville
Frank Thirion & Son Glass Company
531 E. Main Street

Indiana, Fort Wayne
Building Materials & Supply
341 E. Main Street

Indiana, Gary
Ambridge Lumber & Supply Company
2645 Wabash Avenue

Indiana, Indianapolis
Stewart-Carey Glass Company
270 Virginia Avenue

Indiana, Marion
Stewart-Carey Glass Company
1013 S. Washington Street

Indiana, Terre Haute
Stewart-Carey Glass Company
Wabash at 12th

Iowa, Cedar Rapids
M. Cach Glass Company, Inc.
907-09 2nd Street S.E.

Kansas, Kansas City
Window Enterprises, Inc.
301 North 7th Street
P.O. Box 962

Kentucky, Lexington
Lexington Glass Company
867 Angliana Avenue

Massachusetts, Wellesley Hills
McCabe & Dean, Inc.
27 Washington Street

Michigan, Center Line
Allied Millwork & Mfg. Co.
5674 East Ten Mile Road

Michigan, Detroit 9
Export-Import Service Company
4000 W. Jefferson Street

Michigan, Grand Haven
West Michigan Sash & Door Company

Michigan, Saginaw
Saginaw Sash & Door Company
319 McCoskry Street

Minnesota, Duluth
Duluth Builders Supply Company
401 Builders Exchange Building

Nebraska, Omaha
Glass House of Omaha
3904 Lake Street

New York, Buffalo
Hastings Distributors
1630 Bailey Avenue

North Dakota, Bismarck
Vantine Paint & Glass Company
313 Main Street

Ohio, Canton
Pella Window Corporation
1811 Cleveland N.W.

Ohio, Cincinnati 2
H. Neuer Glass Company
508 Reading Road

Ohio, Columbus
Pella Sales Division
Howard S. Sterner Company
4290 Indianola Avenue

Ohio, Mansfield
Home Materials Company
154-160 Orange Street

Pennsylvania, Philadelphia 14
Chew-Bittel Company
6206 Germantown Avenue

Pennsylvania, Pittsburgh 22
Building Specialties Company
951 Century Building

Pennsylvania, Williamsport
Home Supply Company
733 W. Third Street

Pennsylvania, York
Richard P. March
214 N. Beaver Street

Tennessee, Kingsport
Holston Glass Company
545 E. Main Street, Box 328

Tennessee, Knoxville
Aluminum Home Products Company
Carr Street at Southern Railway

Virginia, Richmond 12
Binswanger & Company
3000 W. Leigh Street
P.O. Box 1539

Wisconsin, Appleton
George J. Hoffer Glass Company
613 W. College Avenue

Wisconsin, Windsor
Central Wisconsin Supply Company

FABROW MFG., INC.
7208 Douglas • Toledo, Ohio

NEW PRODUCTS *continued from p. 216*

For further details, check numbered coupon, p. 276

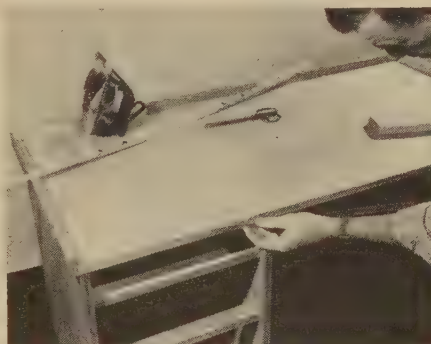
PLYWOOD EDGING, backed with pressure-sensitive tape, goes on in seconds

Raw, unfinished edges of plywood shelves, cabinets or furniture can be veneered in an instant with *Woodtape*, razor-thin (15-23 mils) strips of wood bonded to a pressure-sensitive adhesive.

Sanding of the laminated plywood edge is the only preparation needed. A protective paper is peeled from the adhesive back of *Woodtape*, and the veneer pressed into place. For a more permanent bond, a warm dry iron is run along the edge, forming a joint



Protective paper is stripped from adhesive, after strip is cut to desired length.



Hand pressure (above) makes *Woodtape* adhere. Warm tool (below) gives maximum bond.



that is heat- and water-resistant. The edging is then finished as the plywood is.

For the present, only $\frac{3}{4}$ " *Woodtape* is produced, but other sizes will follow. Red or white Philippine mahogany, fir, birch, walnut or oak tapes are available.

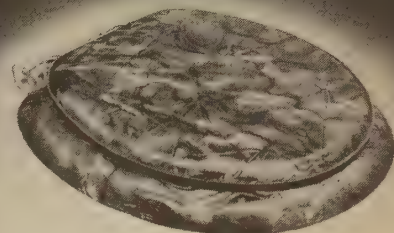
Price: Approx. 8¢-12¢ per lin. ft.

Manufacturer: Elliott Bay Lumber Co.
600 W. Spokane St.
Seattle 4, Wash.

continued on p. 229

Nothing succeeds like

Acceptance



No. 800
Church Black Pearl Seat



In today's quality-minded market, your prospects are looking for everything they can recognize and accept as evidence of quality in your houses.

They have to take a lot on faith. But a Church Seat in the bathroom is recognized instantly. Its quality is as obvious as its good looks. And, known to millions through years of consistent national advertising, it is accepted not only as "the best seat in the house," but as an indication of quality in everything around it.

The handsome Black Pearl Seat (No. 800) shown above is only one of a wide range of styles and colors available . . . at better plumbing stores everywhere.

The name CHURCH on any product stamps it beyond question as the best.

Church Seats

"THE BEST SEAT IN THE HOUSE"

C. F. CHURCH MFG. CO., HOLYOKE, MASS.
DIVISION OF AMERICAN RADIATOR & STANDARD SANITARY CORPORATION

Serving home and industry:

AMERICAN STANDARD • AMERICAN BLOWER • CHURCH SEATS
& WALL TILE • DETROIT CONTROLS • KEWANEE BOILERS
ROSS EXCHANGERS • SUNBEAM AIR CONDITIONERS



House & Home Round Table Panel reports

7 features your prospects

Trane Baseboard Hot Water Heating scores on every single point!

HERE'S WHAT THEY WANT *

1. **"A steady source of heat, not off-again, on-again Finnegan heat."** That's what house buyers want today, reports the Panel. And *you* can give it to them!
2. **"Warm floors, especially if families have small children."** Another definite want, says the Panel. And it's a want *you* can fill!
3. **"Warm walls, especially on the north side."** That's agreed. And it's agreed *you* can dramatize and *sell* this need!
4. **"Comfortable warmth next to windows, so they can sit there."** That certainly makes sense. It means it's *comfort* you must sell!
5. **"No drafts"** . . . enough said! There's just no better way to dramatize the quality you've built in. Don't *you* agree?
6. **"Clean, automatic heat"** . . . what family *doesn't* rate that at the peak! Less cleaning, more comfort . . . *you* sell it like that!
7. **"And they want to heat their houses economically."** That's the clincher! Have you thought of selling *your* houses that way?



CONTACT YOUR WHIRLPOOL DISTRIBUTOR

| | |
|-----------------------------|--|
| ALABAMA | |
| BIRMINGHAM..... | Hart-Greer, Inc. |
| ARIZONA | |
| PHOENIX..... | Arizona Hardware Co. |
| ARKANSAS | |
| LITTLE ROCK..... | Orgill Bros. Arkansas Co. |
| CALIFORNIA | |
| FRESNO..... | Edco Distributing Co. |
| LONG BEACH..... | Graybar Electric Co., Inc. |
| LOS ANGELES..... | Graybar Electric Co., Inc. |
| SAN DIEGO..... | Graybar Electric Co., Inc. |
| SAN FRANCISCO..... | H. R. Bastford Co. |
| COLORADO | |
| DENVER..... | Western Appliance Corp. |
| CONNECTICUT | |
| EAST HARTFORD..... | Roskin Distributors, Inc. |
| DISTRICT OF COLUMBIA | |
| WASHINGTON..... | Joseph M. Zamoiski Co., Inc. |
| FLORIDA | |
| JACKSONVILLE..... | Admiral Distributors, Inc. |
| MIAMI..... | Southern States Distributors, Inc. |
| TAMPA..... | Electric Supply Company |
| GEORGIA | |
| ATLANTA..... | Charles S. Martin Distributing Co., Inc. |
| ILLINOIS | |
| CHICAGO..... | Graybar Electric Co., Inc. |
| DECATUR..... | Crum Distributing Co. |
| PEORIA..... | Graybar Electric Co., Inc. |
| INDIANA | |
| HAMMOND..... | Graybar Electric Co., Inc. |
| INDIANAPOLIS..... | Associated Distributors, Inc. |
| IOWA | |
| DAVENPORT..... | Davis Davidson Co. |
| DES MOINES..... | Roycraft-Iowa, Inc. |
| KANSAS | |
| WICHITA..... | Hennighs, Inc. |
| KENTUCKY | |
| LOUISVILLE..... | Falls City Supply Co., Inc. |
| LOUISIANA | |
| NEW ORLEANS..... | Walther Bros. Co., Inc. |
| SHREVEPORT..... | Frank Lyon Co. |
| MARYLAND | |
| BALTIMORE..... | Joseph M. Zamoiski Co., Inc. |
| MAINE | |
| PORTLAND..... | Graybar Electric Co., Inc. |
| MASSACHUSETTS | |
| CAMBRIDGE..... | The Eastern Co. |
| SPRINGFIELD..... | The Burden Bryant Co. |
| MICHIGAN | |
| BENTON HARBOR..... | West Michigan Electric Supply Co. |
| DETROIT..... | Brennan Appliance Distributors Inc. |
| GRAND RAPIDS..... | Morley Bros. |
| LANSING..... | Morley Bros. |
| SAGINAW..... | Morley Bros. |
| MINNESOTA | |
| MINNEAPOLIS..... | Reinhard Bros. Inc. |
| MISSOURI | |
| KANSAS CITY..... | Lee Wholesale Co. |
| SPRINGFIELD..... | Ozark Motor & Supply Co. |
| ST. LOUIS..... | Brightman Distributing Co. |
| MISSISSIPPI | |
| JACKSON..... | Orgill Bros. Hardware Co. |
| MONTANA | |
| BUTTE..... | Treasure State Gas & Electric Co. |
| NEBRASKA | |
| OMAHA..... | General Appliance Co. |
| NEW YORK | |
| ALBANY..... | Roskin Bros., Inc. |
| BUFFALO..... | Cladco Home Laundry, Inc. |
| MIDDLETOWN..... | Roskin Bros., Inc. |
| NEW YORK CITY..... | Bruno-New York, Inc. |
| ROCHESTER..... | M. E. Silver Corporation |
| SYRACUSE..... | B. H. Spinney Co., Inc. |
| NEW JERSEY | |
| NEWARK..... | Associated Distributors—New Jersey, Inc. |
| NORTH CAROLINA | |
| CHARLOTTE..... | McClain & Pleasants, Inc. |
| RALEIGH..... | Nash-Steele-Warren, Inc. |
| NORTH DAKOTA | |
| FARGO..... | Reinhard Bros., Inc. |
| OHIO | |
| CINCINNATI..... | Griffith Distributing Corp. |
| CLEVELAND..... | Main Line Cleveland, Inc. |
| COLUMBUS..... | American Sales & Distributors, Inc. |
| DAYTON..... | American Sales & Distributors, Inc. |
| TOLEDO..... | Main Line Distributors, Inc. |
| OKLAHOMA | |
| OKLAHOMA CITY..... | Leo Maxwell Co., Inc. |
| OREGON | |
| PORTLAND..... | Electrical Distributing, Inc. |
| PENNSYLVANIA | |
| HARRISBURG..... | Peirce Phelps, Inc. |
| PHILADELPHIA..... | Peirce Phelps, Inc. |
| PITTSBURGH..... | Hamburg Bros. |
| RHODE ISLAND | |
| PROVIDENCE..... | Capital Distributing Co. |
| SOUTH CAROLINA | |
| COLUMBIA..... | Associated Distributors |
| SOUTH DAKOTA | |
| RAPID CITY..... | Hills Gas & Appliance Co. |
| SIOUX FALLS..... | Reinhard Bros., Inc. |
| TENNESSEE | |
| CHATTANOOGA..... | Moore Handley Hdwe. Co., Inc. |
| KNOXVILLE..... | Moore Handley Hdwe. Co., Inc. |
| MEMPHIS..... | Shobe, Inc. |
| NASHVILLE..... | McWhorter, Weaver & Co. |
| TEXAS | |
| AMARILLO..... | Nunn Electric Supply Corp. |
| DALLAS..... | Adleta Company |
| EL PASO..... | Midland Specialty Co. |
| HOUSTON..... | J. A. Walsh & Co. |
| LUBBOCK..... | Nunn Electric Supply Corp. |
| SAN ANTONIO..... | Central Distributing Co. |
| UTAH | |
| SALT LAKE CITY..... | Strevell-Paterson Hdwe. Co. |
| VIRGINIA | |
| RICHMOND..... | Goldberg Electric Prod. Co. |
| WASHINGTON | |
| SEATTLE..... | Whirlpool Northwestern Co. |
| SPOKANE..... | Prudential Distributors, Inc. |
| WEST VIRGINIA | |
| HUNTINGTON..... | Banks-Miller Supply Co. |
| WISCONSIN | |
| GREEN BAY..... | Graybar Electric Co., Inc. |
| MADISON..... | Graybar Electric Co., Inc. |
| MILWAUKEE..... | Graybar Electric Co., Inc. |

NEW PRODUCTS *continued from p. 225*

For further details, check numbered coupon, p. 276

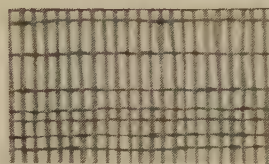
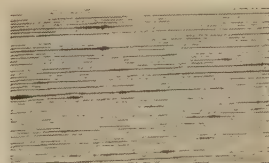
d. ROOM DIVIDERS slide easily over carpeting; can be paneled with many materials

Open planning works best with some provision made for division of space. Entertainment vs. family living, gregariousness vs. privacy, all call for varying space arrange-



Patterns of light through sliding screens give open feeling.

ments. *Carlton Room Dividers* are a new idea in sectional sliding partitions, developed by a pioneer in the sliding glass door industry, Carl P. Dumbolton.



Unlimited variation in patterns is offered by vinyl-embedded textures. Cloth, parchment, etc., are also possibilities. Perforated metal (below) is more formal.



Individual mahogany-framed panels come in a wide range of stock sizes, or may be ordered to individual specifications. They are top mounted with well-known *Grant* aluminum track, and nylon, ball-bearing rollers and fastened at the bottom with a sliding guide that attaches to the bottom rails, rather than to the floor. No cutting of carpeting

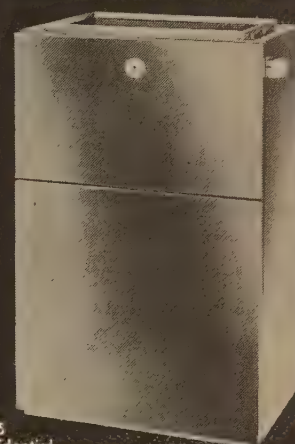
continued on p. 232

NEW... **Barkow**



Weatherwise 5-TON AIR-COOLED and WATER-COOLED Air Conditioners

For HOME or
COMMERCIAL Use



FU-5
Residential



CU-5
Commercial

Newest additions to the famous "Weatherwise" line, these self-contained complete package units offer modern cabinet styling plus these advanced engineering features: one and three-phase hermetic compressors, counterflow cleanable type condensers, aluminum fin evaporators with copper tube and capillary feed, and new cooling-heating switch controls suitable for remote installation and use with standard thermostats. Also available without plenum and fan, or equipped with steam coils.

AUG. G. BARKOW MFG. CO., INC.
2230 So. 43rd St., Milwaukee 15, Wis.

Ads like this sell Plankweld for us —

YOUR LUMBER DEALER IS NOW FEATURING

YOUR LUMBER DEALER IS NOW FEATURING
Beautifully pre-finished, easy-to-install wood paneling
for as little as \$60*

Weldwood Plankweld—a wonderful new kind of real wood paneling—goes up quicker than you can say "Do it yourself!" Comes in 6 fine woods—all guaranteed for the life of your home!

[illegible]

And Plankweld's so easy to put up you can be sure to get the first panel against the wall and clip a nail into the clip into the groove; the clip is nailed to the wall. All the facing strips, no nail, just push them into the clip. Then you in the next row, you push the first (concealing the nail) into the clip. When you get to the last, you push the clip into the wall. No staining, no waxing! Plankweld is made of high quality, thick cut, heavy duty, plaid and triple plaid. You can expect to know that only the best is Plankweld. Like all Wellbond products, Plankweld is guaranteed.

[illegible]

Send today for free folder and gives installation details. Write: Box 101, Dept. A1111, United States, New York, N. Y.

* All prices shown are for Blackwood to panel an approximately 8' x 12' wall.

PRODUCT OF UNITED STATES PLYWOOD CORPORATION

55 West 11th Street, New York 20, New York

Weldwood[®] Plankweld

Over 13,325,000 families will see this Plankweld ad in The Saturday Evening Post, Better Homes and Gardens, House Beautiful, American Home, House & Garden and Sunset. These families are among your best customers for homes, so use the brand of paneling that they know best—Weldwood Plankweld!

and sell homes for you!

Consistent Plankweld advertising pre-sells your customers on Plankweld paneling for unsurpassed quality and unusual beauty in a home.

With the consumer, Weldwood is the best known name in plywood according to a study by an independent research organization. With Weldwood Plankweld you get a "brand name" that your customers know and trust.

It's a brand they buy themselves! Homeowners' response to Plankweld advertising has ranged from "good" to "fantastic" according to our dealers.

Beautiful Plankweld can sell your homes for the same reasons these homeowners buy it.

A Plankweld home is a step ahead of the crowd! Plankweld paneling makes a home in any price class more attractive, more wanted.

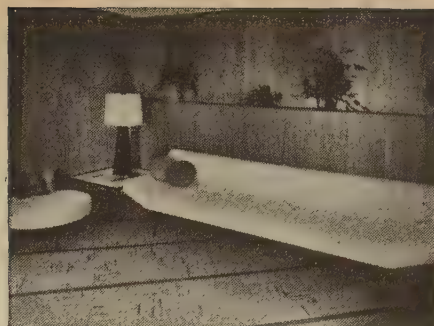
Plankweld's extra easy to put up! 16 1/4" wide by 8' high panels go over studs

with special clips that eliminate face nailing. No nail holes to putty—no butted seams to worry about. What could be easier!

Plankweld comes already pre-finished! All Plankweld is *pre-finished* by expert woodcraftsmen. And *you pay less* for factory Plankweld pre-finishes than for ordinary on-the-job finishes!

Plankweld's guaranteed for life! Your customers know—as you do—that this guarantee is backed by the United States Plywood Corporation . . . the best known name and reputation in the plywood industry!

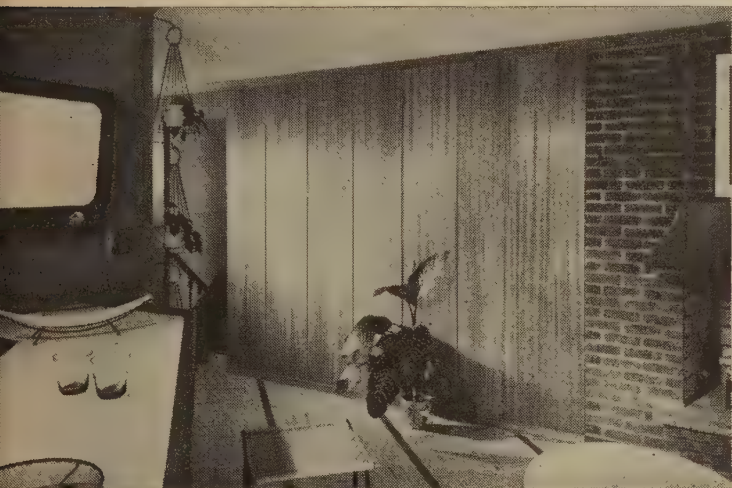
See your lumber dealer or mail the coupon, or visit any of the 73 United States Plywood or U.S.-Mengel Plywoods showrooms in principal cities.



Plankweld is perfect background for both modern and traditional homes. It comes in six fine woods: Oak, Philippine Mahogany, Walnut, Korina®, Honduras Mahogany and Birch.



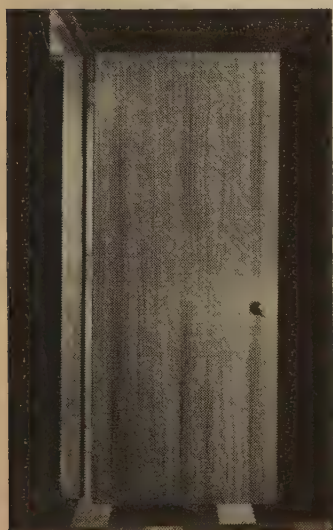
A corner of a room or even one wall of Plankweld gives a lift and sparkle to a whole house. Naturally beautiful wood has a warm and friendly look that can boost your sales!



Plankweld paneled den in Philippine Mahogany is important selling feature in Saddle Harbor Estates, Long Island, N. Y. Builder—Irring Warfield. Arch.—A. H. Salkowitz.



Oak Plankweld paneling in game room helps to carry out look of quality at Salem Ridge development, Huntington, L.I. Builder—Boris Gertzen Assoc. Arch.—Matern & York.



Use Beautiful Weldwood Doors Available in woods to match paneling, they help carry out decorative scheme and create illusion of spaciousness. Weldwood Stay-Strate Doors® are also guaranteed for life against warping, sticking or binding. It's a guarantee that will end your door problems forever!



Weldwood® Plankweld†

†Reg. and Pat. Pending

A product of
UNITED STATES PLYWOOD CORPORATION
World's Largest Plywood Organization

UNITED STATES PLYWOOD CORPORATION
Weldwood Building
55 West 44th Street, New York 36, New York

Please send me full details about Plankweld ()
and Weldwood Doors ().

HH-3-55

NAME.....

ADDRESS.....

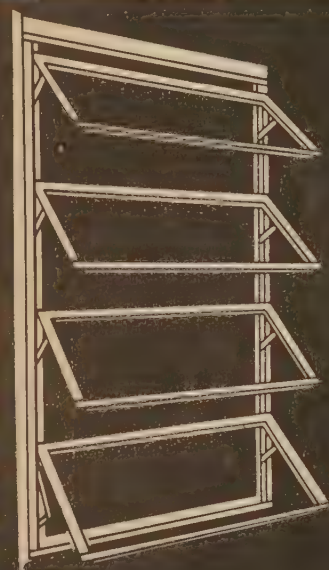
CITY.....STATE.....

NOW... we manufacture VENTO WINDOWS *in both* STEEL *and* ALUMINUM

One of the oldest names in the metal window business, VENTO has continuously manufactured the "Champion" line of casement, basement, commercial and utility steel windows for 33 years.

We now announce our entry into the aluminum window business. Our first

product in this field is the VENTO automatic locking aluminum awning window. Residential casement, double hung and complete commodity lines of aluminum windows are now being developed.



VENTO Aluminum Awning Windows

AUTOMATIC LOCKING . . . No gadgets to turn, no gimmicks to operate, nothing to get out of order.

WEATHER TIGHT . . . VENTO alone keeps metal to metal contact plus metal to weatherstrip.

UNLIMITED ADJUSTMENT . . . Unique in ability to be quickly returned to proper adjustment.

POWER PLUS OPERATOR . . . Screw — not worm geared — operator working in self-lubricating nylon journals.

EFFORTLESS OPERATION . . . Nylon roller blocks at all friction points permit finger tip operation.

ENGINEERED SIZES . . . We are able and eager to make any special window of this type. You will never hear "we can't do it" here at VENTO!



VENTO STEEL CASEMENT WINDOWS

All casements drilled and tapped to receive storm sash and screens, operator arm guide channels attached with screws for easy removal and replacement, if necessary; ventilator frames constructed from the same heavy sections as the outside frame. This provides greater rigidity and stronger ventilators.

VENTO BONDERIZED "CHAMPION"

STEEL BASEMENT WINDOWS

Effortless operation gives any of three ventilation openings, or sash removal. Sturdy 14 gauge jamb fins for easy installation in block or poured concrete walls. A redesigned cam latch and slotted opening allow greater tolerance, insuring positive operation and latching under all conditions.

Also ask about:

VENTO "Thrifty" Steel Basement Windows

VENTO Industrial and Commercial Steel Windows (projected and pivoted types).

VENTO Utility and Barn Windows

VENTO Formed Steel Lintels (for Block and Brick Construction).

Write us for full information. Some desirable territories are open for representatives and distributors. Write for full particulars.

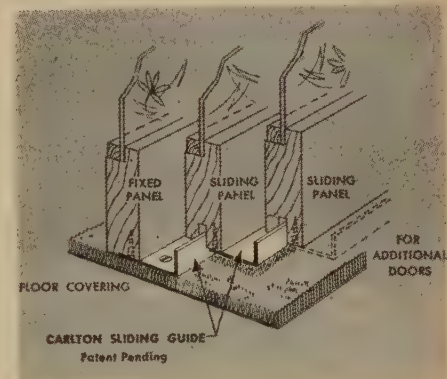
VENTO STEEL PRODUCTS CO., INC.
256 Colorado Ave., Buffalo 15, N.Y.

NEW PRODUCTS *continued from p. 229*

For further details, check numbered coupon, p. 276

need be done, and there is no floor track to accumulate dirt.

Frames have standard finishes of light or dark mahogany or ebony. Inserts may be translucent plastic panels in a wide variety



of interesting laminated designs, or any of the more formal patterns provided by perforated metal. Other materials may be incorporated on special order.

Price: \$2.50 \$4 per sq. ft., depending on size and insert material

Manufacturer: Carlton Products
344 Palisade St.
Pasadena 3, Calif.



e. FOLDING DOOR changes skin as easily as a snake

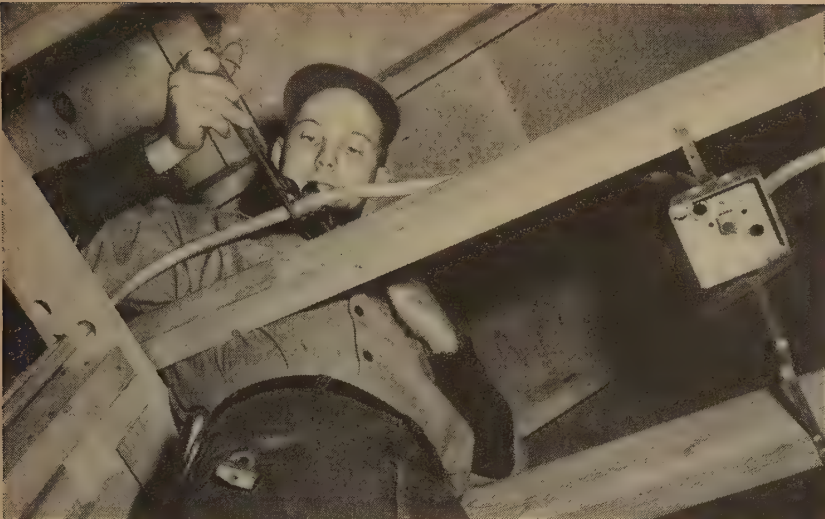
Snap-on covers that allow the color scheme of a room to be changed at any time are a feature of Hough Shade's *Hufcor* laminated folding door, designed by Walter Dorwin Teague.

Covers are five-ply, vinyl faced laminated fabric in five colors. A vertical pantograph, the operating principle, works like a series of linked scissors. Track, trolleys and moving parts are all concealed by the door covers, and the door will not "creep" in either open or closed positions.

Price: 2' 6" opening, \$31; 10' opening, \$146; intermediate sizes in proportion

Manufacturer: Hough Shade Corp.
Janesville, Wis.

continued on p. 236



QUALITY WIRING PROTECTION is provided by Republic ELECTRUNIT EMT, the original lightweight electrical raceway. Exclusive "Inch-Marked"® feature makes it economical for electrical contractors to install. Exclusive inside-knurling makes wire-pulling easier. No threads to cut—compression-type connectors and couplings keep moisture away from wires. It's galvanized to resist rust. Tell your electrical subcontractor you want a modern pull-in grounded steel raceway system. Tell him to insist on Republic "Inch-Marked" EMT. It's another quality feature that sells homes.



QUALITY WINDOWS are made by Republic's Truscon Steel Division, world's largest manufacturer of metal building products. New Truscon Aluminum Awning Windows can be specified and used with complete confidence in their highest quality. In modular and regular sizes. Ventilators operate simultaneously from single crank. Exclusive operating mechanism unmatched for positive action and trouble-free design. Each ventilator weatherstripped with vinyl plastic for airtight seal. Available through dealers backed by Truscon's nationwide warehouse service.



QUALITY KITCHENS made by Republic Steel—the only producer which can guard quality all the way from "ore to store." The Republic line is big, complete. You can design and install "custom" kitchens from economical standard items. Special feature is Republic's new 36-inch double-bowl stainless steel cabinet sink. More standard cabinets for built-in ovens and counter top ranges so popular now. See your Republic Steel Kitchens distributor. Return coupon for his name and address.



Republic Steel Corporation
3122 East 45th Street
Cleveland 27, Ohio

Please send me details on specifications describing

- | | |
|--|--|
| <input type="checkbox"/> Republic Steel Kitchens | <input type="checkbox"/> Truscon Metal Windows and Doors |
| <input type="checkbox"/> ELECTRUNIT® EMT | <input type="checkbox"/> Republic ENDURO® Stainless Steel Roof Drainage Products |

Name _____

Firm _____

Address _____

City _____ Zone _____ State _____

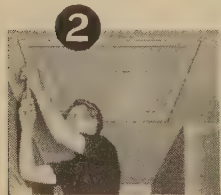
K-8028



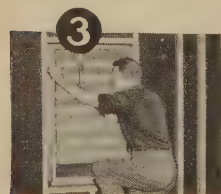
Adds appeal of Built-in Summer Comfort at Lowest Cost!



Fan and shutter arrive set up. Simply place fan over framed ceiling opening. Rubber cushion makes it self-sealing!



Complete automatic shutter unit screws to ceiling opening frame; flange forms trim. No finishing needed.



Ready-made attic louvers can be installed quickly by one man. Sizes for each of various-sized fans.

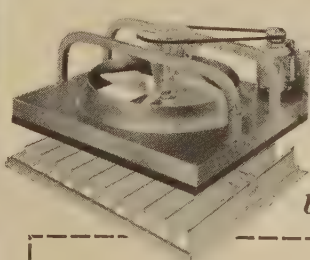
Comfort-minded house hunters buy this R & M Fan idea!

Today, most people consider coolness in summer just as important as warmth in winter. And, in everyone's mind, *complete* home cooling is the ultimate. It's easy to understand, then, why prospective home buyers will be impressed with an R & M Attic Fan! It *cools every room in the house!* Yet you can install this unit—complete with automatic ceiling shutter—for as little as \$137.60*!

Build this sales talk into your homes! Promise cool sleeping, cool living. Get selling benefits *far* beyond its low cost! Requires only 18" of attic clearance; fits narrow hallways. 5000 to 16000 CFM. Available with or without automatic ceiling shutter. Fan guaranteed 5 years; motor and shutter, 1 year. Return the coupon for a reliable guide to better comfort cooling.

*Prices subject to change without notice

ROBBINS & MYERS



"Package"
attic fans

free
booklet!



ROBBINS & MYERS, INC., Fan Division HH-35
387 S. Front St., Memphis 2, Tenn.

Please send me your booklet, "R & M Comfort Cooling and Ventilating A.I.A. File No. 30-D-I."

Name _____

Address _____

City _____ Zone _____ State _____

NEW PRODUCTS *continued from p. 232*

For further details, check numbered coupon, p. 276



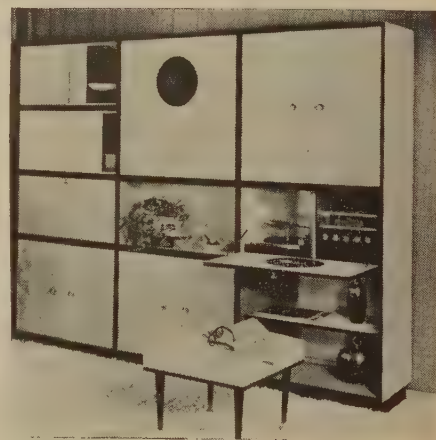
f. STORAGE SHELF fits standard stud widths, may be installed after finish wall

Extra storage space for small objects can be built right into a stud wall with the *ToraT* steel unit that recesses 2 3/4" into the wall.

The unit can be built into the rough framing or installed after the wall is finished. Its 14" width fits between standard 16" stud spacings, and the trim flange covers any raw edges of the cut wallboard.

Price: \$8.95 (quantity discounts can bring the price to \$5.50)

Manufacturer: Breuninger Enterprises
333 Monument Ave.
Malvern, Pa.



g. BUILT-INS AND FURNITURE PATTERNS from leading designers

Both builders and lumber dealers will be interested in a new series of patterns being distributed by U. S. Plywood. Builders will like two built-ins (George Nelson's storage wall and Edward Wormley's screened bar), and lumber dealers as sales agents will like the patterns and materials they require.

Designers William Pahlmann, Freda Diamond, Russel Wright and Peter Hunt are also represented in the series.

Price: 25¢; including materials list, cutting and assembling instructions

Sponsor: U. S. Plywood Corp.
55 W. 44th St.
New York 36, N. Y.

continued on p. 240

Skilled Lennox craftsmen install a Lennox Stowaway heating-cooling package. The Stowaway's compactness makes it ideal for attic or crawl space application. Addition of either a water- or air-cooled horizontal-flow cooling unit gives a complete, efficient, all-season air conditioning system that's out of sight and out of the living area, allowing absolute freedom of interior design.



Curtis Seal

president of Independent Plumbing and Heating Company, Jackson, Miss.—one of 5,278 Lennox dealer-specialists offering builders expert planning, installation, and service on all-season air conditioning. *Wherever you build, there's a qualified Lennox dealer nearby!*



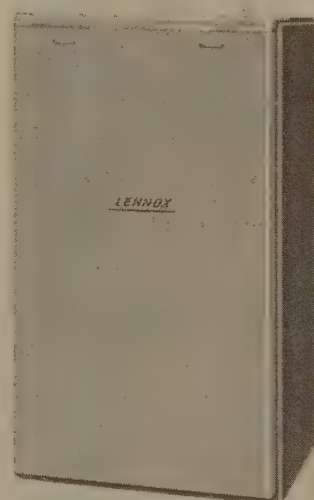
Lennox Opens New Market for All-Season Air Conditioning

If you've had a critical water problem with conventional summer cooling, new air-cooled Lennox units shown at right and below will solve it! *The Lennox CAB-1 series* has a highly efficient air-cooled condenser, and retains advantages of the 100% hermetic system. Maximum life, minimum service requirements. Two- and three-ton capacities. *Lennox remote-type air cooled units* are ideal for space-saving installations. Compressor, condenser blower and automatic controls are placed *outside* the space to be air conditioned. Evaporator, expansion valve and drier fit above, below or in duct work of the furnace. Extra-large condenser; three- and five-ton capacities.



Short Cut to Faster Sales—the LENNOX SALES CONDITIONING PLAN FOR HOME BUILDERS

Move your Lennox-equipped homes faster! Take advantage of the merchandising assistance Lennox offers: more than a dozen practical selling aids that include colorful individualized tract brochures, unique displays, newest ideas in model home point-of-sale material. Get in touch with your Lennox dealer, or wire collect today to your nearest Lennox branch office.

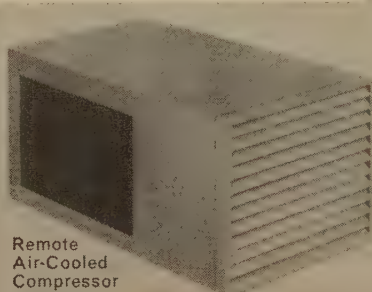


CAB1 Air-Cooled Air Conditioner

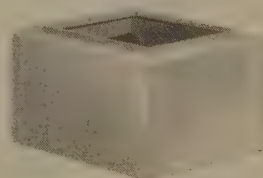
It's Good Business to Buy
LENNOX

World's Largest Manufacturers
of Warm Air Heating Systems

PLANTS IN: MARSHALLTOWN, IA.; COLUMBUS, O.; SYRACUSE, N.Y.; FT. WORTH, TEXAS; SALT LAKE CITY, UTAH; DECATUR, GA.; PASADENA, CALIF. IN CANADA: TORONTO AND CALGARY.

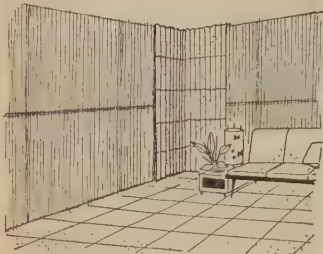


Remote
Air-Cooled
Compressor



Remote Evaporator

DRAPERIES OF Woodweaves BY Suncraft!



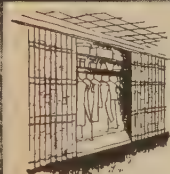
FOR LOW COST SELLING FEATURES

To help sell their houses, builders are specifying luxurious, durable and economical woodweaves by Suncraft. Exceptionally popular and exciting as draperies for today's style-conscious homes, they are endorsed by America's leading architects, designers and builders. Suncraft woodweaves have been custom designed from patterns selected the world over. As doors and dividers, as well as drapes. Suncraft woodweaves are terrific selling features for any builder. Write today.

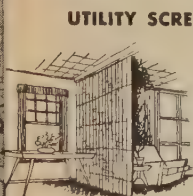
ABSTRACTS—PRESENTING BAMBOO DRAPERIES in their newest and most advanced form. Variation of design and color are limitless.

ROLLO WEAVE— Here is the tie between the traditional and modern—delicate in appearance, but rugged in use.

PLASTIC WEAVE— Combining the strength of plastic with pine gives an easily cleaned woodweave that affords privacy.



CLOSET DOORS



UTILITY SCREENS



ROOM DIVIDERS

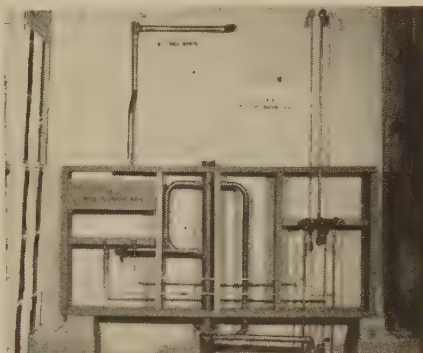
Write today for more information,
early delivery on these
LOW COST MATERIALS!

Suncraft INC.

1317 W. Webster Ave. • Chicago 14, Ill.

NEW PRODUCTS *continued from p. 236*

For further details, check numbered coupon, p. 276



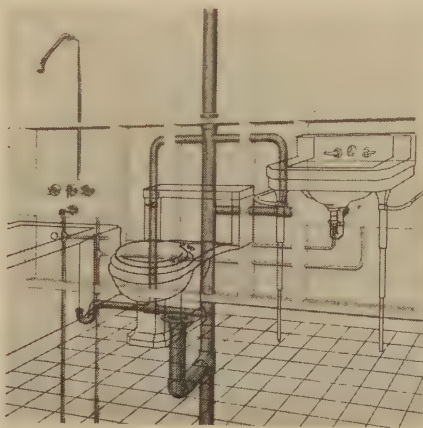
h. **PLUMBING WALL** is prefabricated for four different combination layouts

Prefabrication has come to plumbing.

Four new plumbing walls, three for kitchen-bathroom layouts and one for powder room, are being produced as unit assemblies. *Russ Walls* include both waste and water lines of copper tubing and fit most common plumbing layouts.

All necessary framing, including lavatory backup board, is an integral part of the assembly, which is framed in a 2" x 6" partition. The wall framing is 38½" high, and 7' long to fit any 5' x 7' bath, and becomes a part of the bathroom wall when nailed to joists and adjoining studs.

Wherever possible, bending and extrusion replace fittings in order to reduce possible leaks, and water and waste lines are firmly secured to prevent rattle and hammer. Bath and kitchen are ready for finish wall as



rapidly as the house can be framed. Fixtures for tub and shower are included in the *Russ Wall* package.

The four layouts offered:

1. Kitchen backed up to bath. Only one vent required.
2. Separate kitchen assembly, requiring two vents.
3. Tub on opposite wall to lavatory and closet. Kitchen assembly separate.
4. Powder room. Closet and lavatory only.

Prices: No. 1, \$139.10; Nos. 2 & 3, \$145.58, F.O.B. Pittsburgh (trade prices, not including quantity discounts)

Manufacturer: Crescent Supply of Pa., Inc.
7127 Kelly St.
Pittsburgh 8, Pa.

continued on p. 244

it
Smells
but, good!

Sniff!
Sniff!

**BROWN'S
Super Cedar**

AROMATIC RED CEDAR

Closet Lining

Yes! SUPERCEDAR does smell—but, it's a pleasant, pleasing aroma that appeals to everyone. It's this aroma (and "custom-built" appearance) that will help you sell your homes faster—yet, this extra beauty and protection costs little or NO MORE than ordinary plaster-paint closets! Economical SUPERCEDAR installs quickly over open studding—or over old wood and plaster. Never needs painting! 100% cedar oil content ... **SMELLS**, but good! Factory-sealed 4 and 8 ft. bundles sold by building supply dealers everywhere!

FREE

**CLOSET PLANNING
BOOKLET**

Write for your copy today!

GEO. C. BROWN & CO., Inc.
Largest Mfrs. of Aromatic Red Cedar in the World
GREENSBORO, N. C. Established 1886

Windows that "store" their own screens and storm sash

PELLA CASEMENTS save storage space. Self-storing storm sash stay in place all year around. And RolSCREENS—that roll up and down like window shades—never have to be taken down and stored. Use PELLA CASEMENTS in your homes and gain space in utility rooms, basements and garages.

PELLA CASEMENTS fit all types of wall construction . . . install so quickly. They are simply set into rough wall openings, calked and secured in place by steel interlocking fins.

PELLA CASEMENTS are completely assembled and prefitted at the factory. There's no costly hardware fitting on the job.

Welded steel outer frame reinforces the wood frame to provide maximum rigidity. Sturdy pine sash are constructed with glued mortise and tenon joints. You can achieve countless arrangements by combining stock-size PELLA CASEMENT WINDOWS. See our catalog in SWEET'S Light Construction File or write: ROLSCREEN COMPANY, Dept. G-14, PELLA, IOWA.



ROLSCREENS—All Pella Casements are equipped with inconspicuous Pella RolSCREENS—the original self-storing inside screens that need no putting up, taking down, repairing or storage.



DUAL GLAZING—The year-round Pella self-storing storm window protects against winter cold and summer heat. Reduces street noises up to 40%.

Pella[®]

WOOD CASEMENT WINDOWS

TILES by SPARTA



SPARTAN MOSETTES

An extremely versatile natural clay type tile, available in full range of attractive unglazed colors. Sizes 1x1, 2x1, 2x2, 1/4" thick. Rugged, impermeable, slip resistant, with high degree of vitrification. Mounted in choice of unlimited patterns for easy and inexpensive setting, even in irregular spaces.

A most practical tile for floors in Schools, Hospitals, Institutions and Swimming Pools.

Other Spartan Specialties include:

DRESDEN PORCELAIN — A vitreous porcelain body tile in sizes 2x2, 2x1 and 1x1 approx. Eleven attractive colors to harmonize with or match glazed wall tile. Stain resistant. Easily cleaned. For residential and light duty commercial floors.

CONDUCTIVE TILE — A much needed tile for Hospital Operating Rooms. Provides a conductive medium to dissipate electrostatic charges on personnel and equipment in contact with floor. Meets all specified requirements of National Fire Protective Assoc. Bulletin No. 56.

Write for Complete Information



P.O. BOX 7, EAST SPARTA, OHIO

NEW PRODUCTS continued from p. 240

For further details, check numbered coupon, p. 276



i. LIGHT STEEL SCAFFOLD assembles five ways; 6' or 12' platform heights

Building trades often need off-ground working surfaces, and the latest addition to the Saway line meets that need: Tubular steel scaffolding with both rectangular and tapered frames, is packaged with platform brackets, safety shoes and pivoted cross braces into a single kit.

Frames can be handled by one man, and platform heights up to 12' are possible, by mounting planking on any set of rungs. If turned on its side, the rectangular frame will support a convenient work table, 4' high. Saway is the originator of the portable steel scaffolding used in heavy construction.

Price: \$150

Manufacturer: Saway Steel Products, Inc.
6234 W. State St.
Milwaukee 13, Wis.



j. STAINLESS STEEL SINK, with twin bowls priced to compete with cast iron

For many buyers, the soft sheen of stainless steel is a strong attraction. The Carlton twin-bowl sink claims to be competitive with cast iron, thus adding a sales asset without a price premium.

Some features:

Light weight (twin bowl weighs 17 lbs).

Undercoat deadens sound.

No seams or crevices.

Flange corners rounded to fit Hudee sink frames.

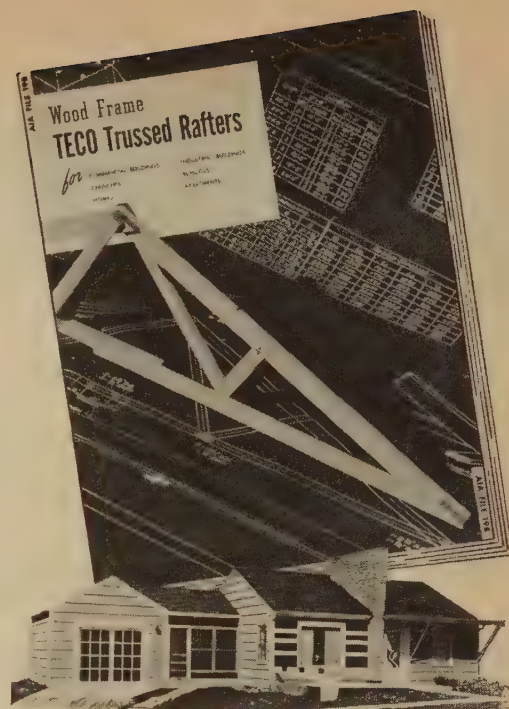
Narrow wall between bowls reduces splash.

Will not chatter while garbage disposer is operating.

Price: \$57 (twin-bowl model)

Manufacturer: Carrollton Mfg. Co.
Carrollton, Ohio

continued on p. 248



More than 150,000 housing units have been built with TECO TRUSSED RAFTERS

By eliminating load-bearing partitions, TECO Trussed Rafters provide clear span roof construction that affords flexibility of interior design and speeds up building schedules.

Common 2x4's and 2x6's, put together in pairs with TECO WEDGE-FIT Split Rings, save materials and labor in trussed rafters up to 32 feet in span.

See how others have saved time, money and materials by using TECO Trussed Rafters in homes, schools, churches and other building construction . . . send for your FREE copy of this booklet TODAY.

TIMBER ENGINEERING CO.

1319 18th STREET, N.W., WASHINGTON 6, D.C.

Please send FREE copy of "Wood Frame TECO Trussed Rafters."

Name.....

Company.....

Street.....

City.....Zone.....State.....

HH-552

on 1600 sq. ft. Deck job!"

...says Jack Dobbratz, Prospect Heights, Illinois



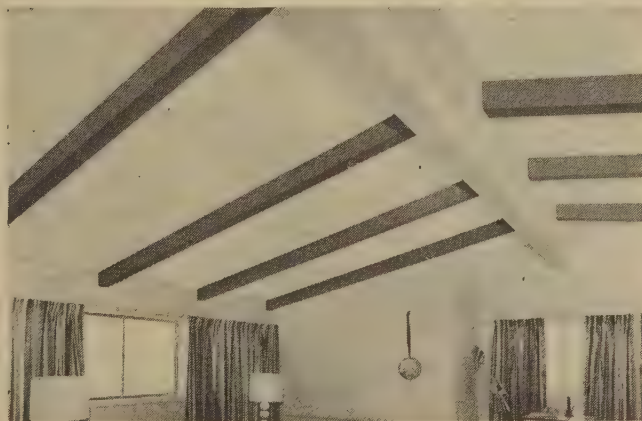
Insulite combines Roof Deck, Insulation and Finished Ceiling in a single money-saving product. Saves \$80 to \$300 per M sq. ft. on exposed-beam ceiling jobs *in any climate*. Jack Dobbratz puts it this way. "I figure 1,000 sq. ft. of wood decking takes 34.3 man-hours and costs me \$111.48. With 2" Insulite Roof Deck, I can lay the same area in 7.5 hours at a cost of only \$24.38. On a 1600 sq. ft. roof, that's a saving of \$139 on labor alone." Dobbratz saves another \$207 on finishing materials and labor with Roof Deck's pre-finished ceiling. Here's how.



It's Roof Deck. Two by eight-foot units cut application time 45% or more. Only one material to handle. New Insulite Roof Deck eliminates need for separate roof boards, insulation, lath and plaster and ceiling finishing. Roof Deck can save 12 man-hours or more per 1,000 sq. ft. of surface compared with 2"x6" D&M roof sheathing.



It's Insulation. No need for other insulation. Two-inch Roof Deck, for example, is comparable to 2" wood deck plus 1" fiberboard insulation and meets heat loss requirements for roof and ceiling construction. Absorbs sound better than wood or plaster. Exclusive vapor barrier combination protects against condensation within the unit.



It's Finished Ceiling. The underside of Insulite Roof Deck is finished with white flame-resistant surface at the factory. Simply lay Roof Deck over pre-finished beams and the ceiling is done. No need to plaster, paint, stain or wax. Reduces labor and material costs. Insulite Roof Deck is available in 2'x8' units, 1½", 2" and 3" thick with or without Insulite's exclusive vapor barrier.



Bldrite Sheathing saves extra \$84 on Dobbratz home. Goes up faster, easier. Cuts application time as much as 43% compared with wood. Adds strength. Four-foot Bldrite has more than twice the bracing strength of horizontal wood sheathing, thus saves corner bracing. Waterproofed throughout with asphalt. Eliminates need for building paper.

SELL MORE HOMES!

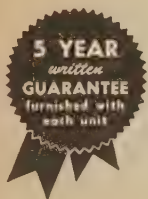
Assure your prospects of adequate storage space. Precision and Simplex Folding Stairways can help your homes move fast for more profits!

PRECISION QUALITY

Plus Sales Features

AMERICA'S NO. 1 STAIRWAY

Stocked by 130 leading jobbers in the U.S.A. and Canada.



SEVEN EXCLUSIVE FEATURES

- 1—HYDRAULIC SAFETY CHECKS
- 2—ACTUATED BY COUNTERWEIGHTS
- 3—LIFE-TIME ROLLER BEARINGS
- 4—RUGGED AND STRONG
- 5—INSULATED DOOR PANEL
- 6—FULL WIDTH SAFETY TREADS
- 7—FITS ANY CEILING HEIGHT

TWO STANDARD SIZES: 8'9" & 9'9"

SIMPLEX QUALITY

Plus Low Cost

NO. 1 PROFIT-MAKER



New! BALANCED SPRING ACTION for effortless operation.

- SIMPLE AND EASY TO OPERATE
- RUGGED AND STRONG
- TWO STANDARD SIZES—8'3" & 9'9"
- NO. 1 KILN DRIED LUMBER—HEAVY GALVANIZED STEEL—ALL PARTS SECURED BY BOLTS AND SCREWS—NO NAILS
- SHIPPED IN ONE PACKAGE MANUFACTURED IN PRECISION'S MODERN PLANT.



MANUFACTURED BY
PRECISION PARTS CORP.
400-HH North First Street • Nashville 7, Tennessee

NEW PRODUCTS *continued from p. 244*

For further details, check numbered coupon, p. 276



k. STONE-LINED WATER HEATER thumbs its nose at hard, corrosive water

New England, with its corrosive water, gets special water-heater treatment from a new Westinghouse appliance.

The inside of the tank is lined (at least $\frac{3}{8}$ " thick) with rustproof hydraulic stone to resist the water's corrosive effect. Each tank carries a 20-year guarantee against failure.

Thermostats can be set to deliver water from 120° to 170° F., are built to withstand abnormal power surges, and are sealed against dirt. Heating elements are directly immersed in the water, and a baffle prevents incoming cold water from diluting the hot water already stored. A bottom drain valve permits flushing of sediment.

Price: 52 gal.: \$179.95; 66 gal.: \$204.95; 80 gal.: \$219.95

Manufacturer: Westinghouse Electric Corp.
Electric Appliance Div.
Mansfield, Ohio



l. FIRECLAY DUCTS for perimeter heating systems come in complete package

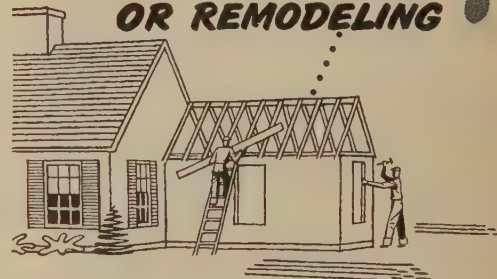
Specifically designed for heating service, Ceramiduct is made of fireclay, and is marketed with a complete line of fittings.

The system is delivered to the job in one complete package, including whatever curves, elbows, tees or wyes, reducers or increasers are required by the layout. Storage is no problem for weather extremes have no effect on the material.

Ducts are laid on tamped gravel, and connected with drawbands which force a sealing

continued on p. 252

Adding a Room? OR REMODELING



ELECTREND ELECTRIC HEATING SYSTEM

*Exclusive Circulating Method
Provides Uniform Heat*

AT MODEST COST!

Electric heating is already proving highly successful in thousands of homes. ELECTREND offers you the most satisfactory method for heating added rooms ... or for augmenting inadequate heating plants in older homes. Why wait? Get the facts—then recommend ELECTREND. You'll gain more satisfied customers; show a higher profit on every job!

CHECK THESE ELECTREND ADVANTAGES

- Pulls warm air from ceiling, reheats and circulates into room.
- Simple, low-cost installation. No special skill required.
- Outstanding safety. UL approved.
- Completely automatic. Thermostatically controlled in every room.
- Long years of satisfactory performance. No maintenance—annual checkups eliminated.
- 100% clean. Customers appreciate absence of ashes, soot, smoke, fuel.



Exclusive Electrend Circulating Principle

The exclusive ELECTREND system pulls warm air from ceiling, reheats and circulates into room through register at floor level. This method gives more comfortable, uniform heat and represents a savings in operating costs. ELECTREND units have been designed for new construction or supplementary heating.

*Write today... Free Literature
tells complete ELECTREND story!*

Electrend

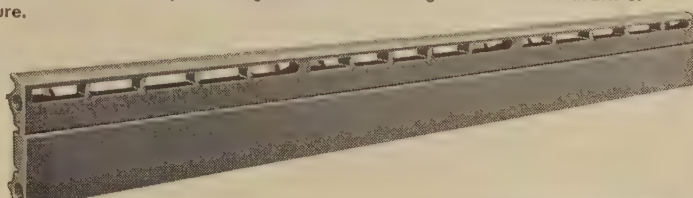
ELECTREND PRODUCTS CORPORATION
17 State Street St. Joseph, Michigan



In this modern living room, Crane Radiant Baseboard permits the use of a wide expanse of glass without creating uncomfortable drafts or "chill spots." Doesn't interfere with drapes or placement of furniture.



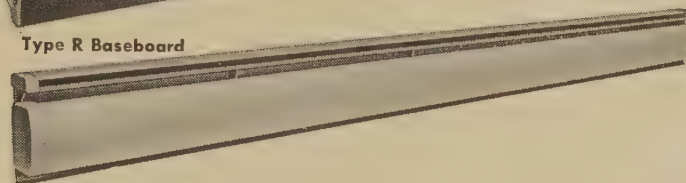
In kitchens, Crane Radiant Baseboard may be installed at ceiling level. In all rooms, it can be painted to match walls or decor.



Type RC Baseboard



Type R Baseboard



Type F Copper Tube Baseboard

CRANE CO.

General Offices: 836 S. Michigan Ave., Chicago 5, Ill.

VALVES • FITTINGS • PIPE • KITCHENS • PLUMBING • HEATING

**CRANE STARTS
ITS SECOND CENTURY
OF QUALITY**

Founded July 4, 1855

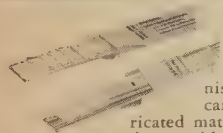
SURE SIGN OF MORE VALUE AT VERY LITTLE COST...



For all types of windows and doors

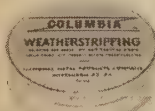
By using National Weatherstripping on the homes you build, you can give your buyers *extra value for their money*. That's because National Products make any house more weatherproof, more comfortable, and much less expensive to maintain. Yet, the added buy appeal of National Weatherstripping costs only a few dollars per house—certainly a worth-while investment in added customer satisfaction, quicker sales, and greater profits.

PACKAGED WEATHERSTRIP for DOORS and WINDOWS



Made and stocked in sizes for all standard windows and doors, National Packaged Weatherstrip is furnished in individual cartons. Each carton contains enough prefabricated material for one window or one door, with sufficient screws and nails.

COLUMBIA SPRING WEATHERSTRIPPING



National's Columbia Spring Weatherstripping is available in either bronze or aluminum. It's furnished in 17' or 100' rolls, pre-punched and with an ample supply of nails, ready for speedy, simple installation.

NATIONAL THRESHOLDS, SILLS, SADDLES



All are supplied pre-cut to standard sizes, polished, and completely machined and individually wrapped with necessary screws and hooks. They're made of aluminum or bronze in a number of styles to suit any requirement.

Look To NATIONAL For HIGHEST-QUALITY

- Metal weatherstripping
- Linoleum binding and edging
- Special rolled moldings
- "Tripl-Tite" aluminum siding



Order from your dealer . . . or
MAIL COUPON TODAY
for complete details

National Metal Products Co.

Dept. BS-5502, 1001 Ridge Ave., Pittsburgh 33, Pa.

- ☐ Please send information on the complete National line.
☐ Advise name of nearest dealer.

Name _____

Address _____

City _____ Zone _____ State _____

NATIONAL METAL PRODUCTS COMPANY

1001 Ridge Ave. • P.O. Box 9965 • Pittsburgh 33, Pa.

NEW PRODUCTS *continued from p. 248*

For further details, check numbered coupon, p. 276

compound into the joints and also align the pipe sections. Even if the drawband disintegrates in time, the asphaltum joint should remain straight and tight.

Ducts do not have to be anchored or supported because they will not "float" when the concrete slab is poured.

Register boxes are available for either perimeter loop or radial systems, and designed to be installed flush with the top of the slab. The kerfed tops can then be knocked out to install the registers.

Register noise and turbulence are kept to a minimum by the smooth inner surface, and the material is not subject to corrosion.

Price: \$60-\$80 (for radial duct system) including labor and fittings

Manufacturer: Straitsville Brick Co.
New Straitsville, Ohio



m. FIREPLACE, prefabricated from hearth to chimney, is approved for zero clearance

A new full-size fireplace bolts to the studding as easily as a kitchen cabinet. Though it is large enough to burn 27" logs, the *Uni-bilt* needs no foundation or masonry chimney.

The high temperature ceramic firebox is supported on a cantilevered hearth, with both fireplace and chimney sections encased in a steel outer shell. Baffles and insulation dissipate heat, so that the outer surface never becomes more than warm to the touch.

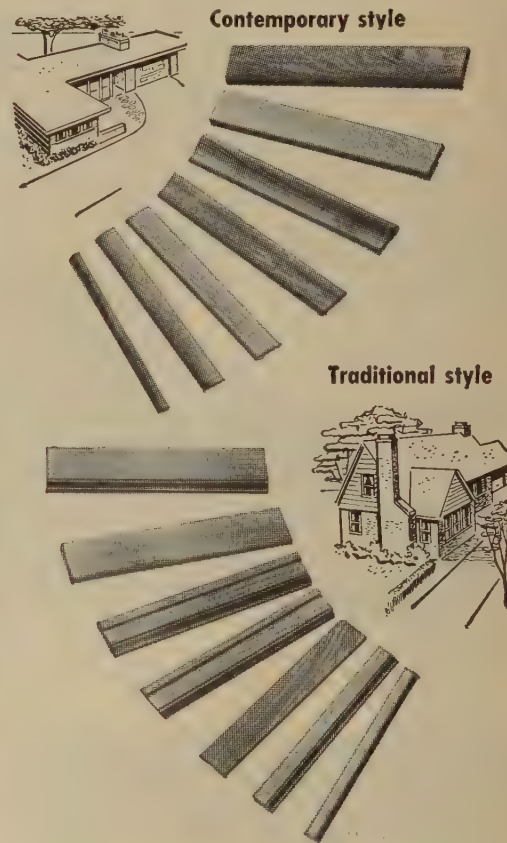
After the *Uni-bilt* is bolted to the wall, either flush or recessed, the chimney sections are extended through the roof and the chimney housing flashed into place. No reinforcing of walls or floors is required. No mantel is needed and the receding lines of the hood minimize the visual size of the pre-primed chimney.

A flexible firescreen and a counter-balanced damper are standard equipment, and the hearth opening is framed in stainless steel.

Price: \$350

Manufacturer: Uni-bilt Div.
Vega Industries, Inc.
Syracuse 5, N. Y.

You can save money with **Roddiscraft** **STOCK HARDWOOD MOLDING AND TRIM**



Ready to Install

- Birch
- Oak
- Mahogany
- Walnut

WHY pay premium prices for hardwood molding and trim? Your dealer can supply you with Roddiscraft stock hardwood molding and trim at amazingly moderate prices. It's ready and waiting for your dealer at his nearest Roddiscraft warehouse.

For added economy, you can get Roddiscraft hardwood molding and trim cut-to-size in packages. It is also available by the lineal foot. Hardwoods other than those mentioned above are available on special order. Call your dealer for all the facts, or mail the coupon below.

Roddiscraft

WAREHOUSES IN PRINCIPAL CITIES

RODDISCRAFT, RODDIS PLYWOOD CORP.

Marshfield, Wisconsin

Please send me full information on Roddiscraft hardwood trim.

Name _____

Firm Name _____

Address _____

City _____ Zone _____ State _____

TO OUTDOOR LIGHT AND BEAUTY

Windowalls

TRADEMARK OF ANDERSEN CORPORATION

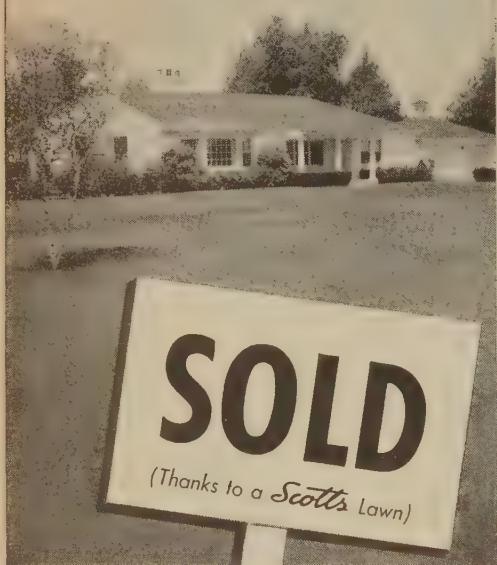


On attractive homesites like this, Andersen WINDOWALLS become a building feature that greatly enhances the homeowner's pleasure. Here, Architect Norman Johnson has specified a wall of Andersen Gliding Units to make the beauty of this lake a part of daily living. WINDOWALLS capture the view, let in sunshine, open wide for ventilation. Yet they close tight to form a weatherproof barrier on windy, wet or wintry days.

For more information on the advantages of Andersen WINDOWALLS in homes you plan or build, see your millwork dealer, Sweet's Files, or write direct to Andersen. WINDOWALLS are sold by established millwork dealers throughout the country including the Pacific Coast.

ANDERSEN CORPORATION • BAYPORT, MINNESOTA

A Scott's[®] LAWN
always helps
make the sale!



Yes, Scotts seeded lawns are a profitable sales investment.

It's a mistaken idea that Scott lawns are expensive. Actually, you sow enough less of Scotts seed (nearly 3 million seeds per pound) to offset the price difference from so-called "bargain" mixtures. Thus, **for the same cost and planting time, you give buyers lasting lawn beauty . . .** for Scotts is a proven blend of 100% perennial grasses—99.91% weed free.

You'll be a friend of the family for life when you give them a Scotts lawn.

Start this spring to profit from the sales appeal by saying "My homes include permanent Scotts lawns." Write our turf specialists for recommendations and details on Scotts builder service prices.



Read LAWN CARE[®]. Keep up-to-date on lawn building developments. A complete file of back issues on soil conditioning, grading, drainage, feeding, seeding, etc., plus subscription to future issues are yours for the asking.



FREE Lawn Building Help

O M Scott & SONS CO.,

74 Spring St. Marysville, Ohio, also Palo Alto, Calif.

Send your FREE Lawn Care file and gratis 2-year subscription to future issues.

Name _____
Firm _____
Address _____
City _____ State _____

TECHNICAL PUBLICATIONS

142. MASONRY TOOLS. 1955 catalogue. Goldblatt Tool Co., Dept. HH, 1910 Walnut, Kansas City 8, Mo. 100 pp. 5" x 8"

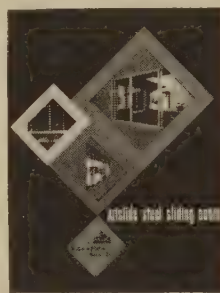
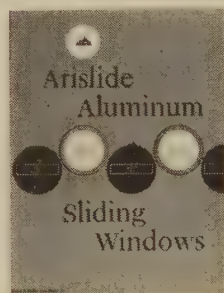
Complete line of tools for the trowel trades, with illustrations and prices, compiled by a firm that dates back to 1885.

143. CONCRETE MASONRY. The Besser Era. Besser Mfg. Co., Dept. HH, Alpena, Mich. 48 pp. 8½" x 11"

Written to celebrate Besser's Golden Jubilee, this book is actually a history of the growth of the concrete masonry industry from its hand-forming beginnings to the 2 billion unit production of today.

144. FLUE LININGS. Clay Flue Lining Institute, Dept. HH, 611 First National Tower, Akron 8, Ohio, 6 pp. 8½" x 11"

Recommendations for chimney construction as proposed by the National Board of Fire Underwriters. The brochure was designed to serve as a model ordinance for chimney construction for cities or towns of any size.



145. SLIDING WINDOWS AND DOORS. Arislide Aluminum Sliding Windows and Steel Sliding Doors. Michel & Pfeffer Iron Works, Inc., Dept. HH, 212 Shaw Rd., South San Francisco, Calif. 6 and 12 pp. 8½" x 11"

Specifications, sections and details of these horizontal sliding units. Photographs.

146. SIDING. Western Red Cedar Lumber Assn., Dept. HH, 4403 White-Henry-Stuart Bldg., Seattle 1, Wash. 8 pp. 8½" x 11"

Grades and uses, estimating tables and full color photographs of houses built with red cedar siding. Also available is a pocket-sized siding estimator.

147. INSULATION. Aerocor Insulations. Owens-Corning Fiberglas Corp., Dept. HH, Toledo 1, Ohio. 8 pp. 8½" x 11"

All of the types and uses of this resilient blanket-type glass-fiber insulation illustrated and described.

148. PAINT. Special catalogue. National Chemical & Mfg. Co., 3617 S. May St., Chicago 9, Ill. 12 pp. 8½" x 11"

The full line of Luminall paints and products, with recommendations for specific uses.

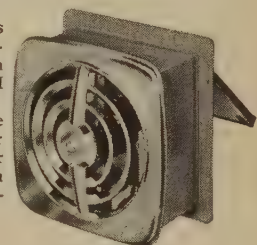
continued on p. 260

Broan LEADS with Motordor EXHAUST FANS



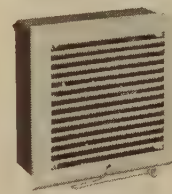
*Motordor Automatic Fans in
12", 10" and 8" sizes*

No other Exhaust Fan has all of the BROAN Motordor features. No. 11C Fan (10") with "FANTOM GRIL" and No. 840C (8") with Venturi-Design grille are illustrated. Fan motor and Outer Door motor both are controlled by a single switch for automatic operation.



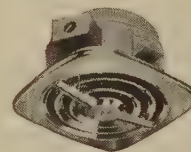
**Why BROAN Exhaust Fans
are preferred**

Every modern advance in home ventilation is represented in today's complete line of BROAN Ventilating Fans. In addition to the fully automatic MOTORDOR Fans, the BROAN line includes 8", 9", and 10" Chain Control Wall Fans, and 8" and 10" Ceiling Fans — adapted to every possible installation requirement in kitchens, bathrooms, nurseries, recreation and utility rooms, regardless of size.



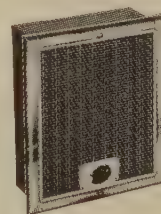
Broan Chain Control Fan with "FANTOM-GRIL" — No. 6C

**"FANTOM-GRIL"
is exclusive**



Broan 8" Ceiling Fan No. 872

"FANTOM-GRIL", the only grille that conceals fan interior from view, makes possible the greater volume and efficiency of airflow.



Broan Electric Heater No. TU-15. Thermostat Control.

Distinguished by modern design, top-ranking quality, and an outstanding quarter-century record of satisfactory service in hundreds of thousands of homes, BROAN equipment . . . including fan-type electric heaters . . . is recognized as the leading preference of Architects, Electrical Contractors, Builders and Home-owners.

Write today for FREE 1955 Catalog
BROAN MFG. CO., INC.
1679 N. WATER ST. • MILWAUKEE 2, WIS.



SEE THE DIFFERENCE: These surprising before-and-after pictures show the crisp new look that can be given to masonry walls in a matter of a few hours . . . for a matter of a few dollars. Flush vertical joints and tooled horizontal joints give the effect shown.

Here's a *NEW EXPRESSION* for masonry faces

Today's architects are transforming concrete block and other masonry walls to surfaces as handsome as they are durable. With the application of a cement paint even the roughest-textured blocks take on a smooth, clean surface that will resist moisture, dirt and dust in any climate.

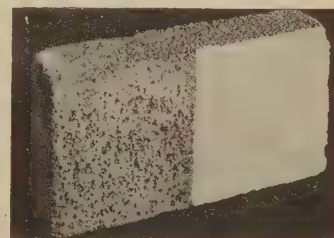
The paint forms a permanent bond with the wall—becomes an integral part of it. Economical cement paint is easy to apply to concrete or masonry. On a dampened surface the paint is simply brushed on—first over joints—then over the entire wall.

Color selection is complete. The true white of Atlas White gives full value to the delicate tones of pigment colors.

Cement paint and stucco manufacturers recog-

nize the uniform and true whiteness of Atlas White. That's why they specify it in their superior products. Whether you use a convenient easy-to-use factory-prepared mix or job-mix your own paint, be sure it's made with Atlas White Cement.

For further information see SWEET'S Catalog, sections 4E/7a and 13C/5, or write to Atlas White Bureau, Universal Atlas Cement Company (United States Steel Corporation Subsidiary), 100 Park Avenue, New York 17, N. Y.



CONCRETE BLOCK partially covered with cement paint. Note how voids are filled and the rough texture smoothed to form a bright, clean surface.

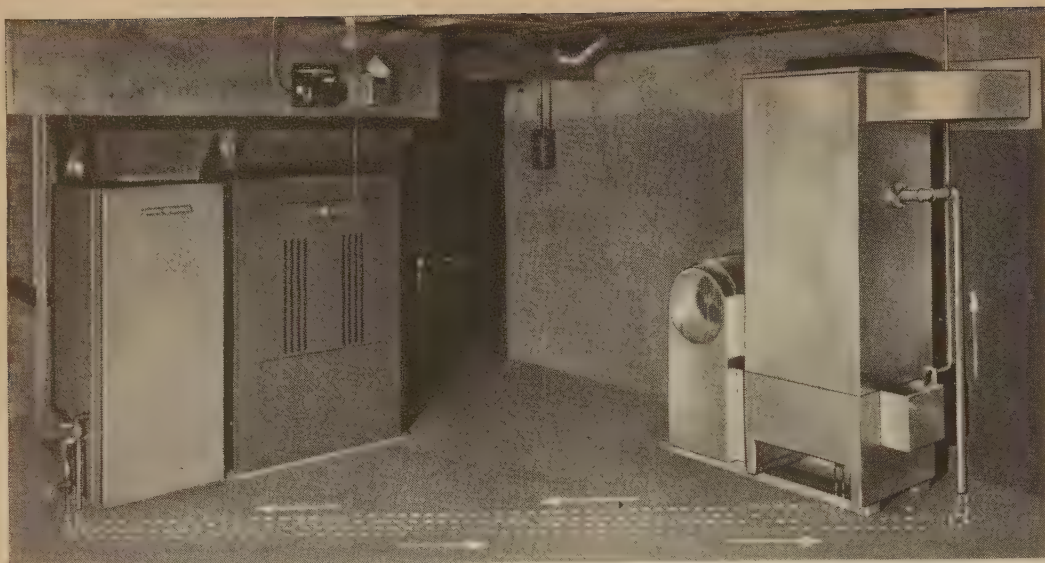
HH-WCP-22R

Cement paint used on job above was made by Penn Crete Products Co., Philadelphia, Pa.



FOR BEAUTY AND UTILITY
ATLAS WHITE CEMENT
FOR TERRAZZO, PAINT, SLABS, STUCCO

UNITED STATES STEEL HOUR—Televised alternate weeks—See your newspaper for time and station.



Because of its noiseless operation, the new Binks Residential Cooling Tower can even be installed in the basement of a home, or in utility or recreation rooms. Takes up very little room.

New residence cooling tower extremely quiet..economical

IT CUTS COOLING WATER BILLS 95%

Today...a cooling tower is a must in every air conditioning installation involving water cooled condensing units. Homes are no exception. In many communities the use of water for this purpose is restricted. In others high water

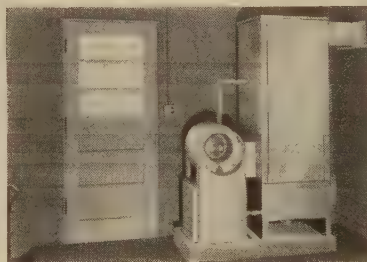
rates result in excessive operating costs. A Binks Residence Cooling Tower makes it possible to cool and recirculate the condensing water...at a tremendous saving.

HERE'S WHY builders prefer Binks Residential Towers:

- 1 Quiet operation!** Noiseless, squirrel-cage type blower supplies ample air movement at operating speeds far below the noisy propeller-type fans used in conventional cooling towers. All metal-to-metal connections are rubber cushioned. Interior surfaces are protected and soundproofed with heavy undercoating.
- 2 Compact!** Fits into small space...in basement, garage, breezeway, out-doors.
- 3 Easy to install!** Comes fully assembled ready for immediate water, electric and duct connections.
- 4 Low maintenance!** All metal surfaces are heavily galvanized and given several coats of good paint. Construction is rigid. Nozzles are clog-proof. No moist air reaches the air propulsion mechanism.
- 5 Efficient!** Binks' 25 years experience in the development and manufacture of successful commercial towers assures correct design and high efficiency for this residence tower.
- 6 Attractively priced!** These towers are mass produced for economy. Cost no more than for ordinary equipment.



They're built to stand exposure when placed outside the house.

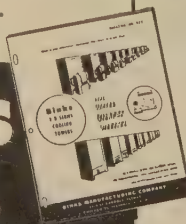


Available space in garage, carport or breezeway can be used.

Call your nearby Binks representative who knows cooling towers from A to Z.
See your classified phone directory...or write direct for full information.

SEND TODAY for free booklet 477 which illustrates and describes Binks Residence Cooling Towers of several capacities. No obligation.

Binks
COOLING TOWERS
FOR HOMES AND INDUSTRY



MAIL COUPON NOW!

Binks Manufacturing Company
3128-32 Carroll Avenue, Chicago 12, Ill.

Gentlemen: Please rush FREE Cooling Tower Bulletin 477 and other facts, including prices.

NAME _____
COMPANY _____
ADDRESS _____
CITY _____ ZONE _____ STATE _____

TECHNICAL PUBLICATIONS

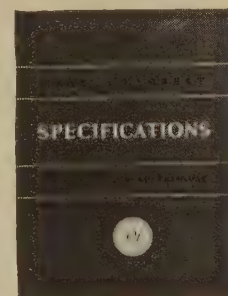
Continued from p. 256

- 149. FLOORING.** Colored Oak Block Flooring. Parkay, Inc., Div. of Wood-Mosaic Corp., Dept. HH, Louisville 9, Ky. 8 pp. 6" x 9"

Color photographs of this prefinished block flooring illustrating the five colors and two natural tones offered.

- 150. TOOLS.** Quality Electric Tools. Porter-Cable Machine Co., Dept. HH, 1714 N. Salina St., Syracuse 8, N.Y.

Electric tools for building, woodworking and maintenance. The catalogue is accompanied by a matching price sheet.



- 151. PAINTS.** Specifications. Pratt & Lambert, Inc., Dept. HH, 3301 38th Ave., Long Island City 1, N.Y. 8 pp. 8 1/2" x 11"

Condensed specifications for almost any painting job, regardless of surface or finish.

- 152. PLASTICS.** What to Look for in A Good Translucent Building Panel. Corralux Div., Dept. HH, Libbey-Owens-Ford Glass Co. P.O. Box 20026, Houston 25, Tex.

Standards of manufacture and performance that should distinguish the inferior panel from the satisfactory product.

- 153. HARDWARE.** Yale Fairfield Locksets. Yale & Towne Mfg. Co., Dept. HH, Chrysler Bldg., New York, N.Y. 6 pp. 8 1/2" x 11"

Tubular locksets for low cost housing, pre-assembled to save workmen's time. Installation instructions.

- 154. WINDOWS.** Window Shopping? J. S. Thorn Co., Dept. HH, 8501 Hegerman St., Philadelphia 36, Pa. 24 pp. 5 1/2" x 8"

Written to reach the consumer, this brochure will also be welcome to the professional, for it discusses all popular window types, the functions and advantages of each in contemporary architecture. Included are descriptions of all Thorn windows.

- 155. SLIDING DOORS.** Sun Valley Sliding Door Co., Dept. HH, Sun Valley, Calif. 6 pp. 8 1/2" x 11"

Sizes, details and specifications of these aluminum sliding glass walls.

continued on p. 264

If you build for select communities, you will profit most with **moderns**

THE "FAIRLANE"



THE "MANOR"



THE "BRENTWOOD"



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THE "CAPRI"



THE "WINDSOR"



—because Modern Homes are obviously *designed* for the builder whose special interest is quality. Each is fabricated with precision, of the finest materials exclusively!

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—because Moderns are exceptionally salable, for many reasons—including such all-new dramatic features as power-operated windows and sound-conditioning!

—because Modern Homes are exclusively franchised, to protect you, the dealer, and guarantee the highest standards. You are backed by national advertising and quality literature.

There are still a few franchises available in choice areas. If you are interested in *quality* volume, write for full information. Modern Homes Corporation, 14507 West Warren Avenue, Dearborn, Mich.

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Slash Costs

with this complete, packaged, all-purpose

Fireplace AND Chimney!

**NO MASONRY
NO MORTARING
ALL CLEARANCES
ARE BUILT IN**

sets right against
combustibles—walls,
floors, joists, beams,
studs and roofing—
**with
FULL
SAFETY**



Sturdy aluminum
top has realistic
wire-cut-brick
texture, shape
and finish.

**Permits ANY
Mantel Design**

**A REAL ALL-PURPOSE
OPEN-HEARTH FIREPLACE!**

Majestic's Thulman Fire-
place is a full-sized, full-
service fireplace with chim-
ney. Mass-produced at a
fraction of conventional fire-
place-and-chimney costs, it
drastically cuts installation
time and expense. Permits
either floor-level or raised
installations—flush-with-
wall or with a mantel of any
design or finish.

MORE EFFICIENT

Smooth, low-friction stain-
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up; attains maximum draft
pull quickly.

**QUICK, EASY ONE-MAN
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No heavy masonry. Rugged,
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one man.

**FIRE-SAFETY CLEARANCES
ARE BUILT IN!**

Both fireplace and chimney
feature triple all-metal, air-
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Write for illustrated bulletin!

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416 Erie St., Huntington, Indiana

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THULMAN FIREPLACE

TECHNICAL PUBLICATIONS

(Continued from p. 260)

- 156. PANELING.** 1955 Marlite Catalogue. Marsh
Wall Products, Inc., Dept. HH, Dover, Ohio.
8 pp. 8 1/2" x 11"

A colorful presentation of the entire line of
prefinished Marlite panelings for use in new
or remodeled construction.

- 157. CEMENT.** Medusa Cements Manual. Medusa
Portland Cement Co., Dept. HH, 1000 Mid-
land Bldg., Cleveland 15, Ohio. 26 pp.
3" x 6"

A pocket-sized encyclopedia of specifications
and uses of portland cements with data on
proportions, mixing and curing concrete,
stucco and plaster. Waterproofing and color-
ing of concrete is explained and quantity
tables make estimating easier.

- 158. GLASS.** Glass for Residential and Commer-
cial Use. Catalogue No. 55. Mississippi
Glass Co., Dept. HH, 88 Angelica St., St.
Louis 7, Mo. 12 pp. 8 1/2" x 11"

Figured glasses for structural and nonstruc-
tural uses, with accurate diffusion data and
illustrations of finishes and patterns.

- 159. HEATING.** Metalbestos Gas Vent Pipe. Wil-
liam Wallace Co., Dept. HH, Belmont,
Calif. 12 pp. 8 1/2" x 11"

Both round and oval pipes and fittings are
illustrated, together with all needed technical
data and cutaway drawings.



- 160. ADHESIVES.** Products for Building Construc-
tion. Minnesota Mining & Mfg. Co., Dept.
HH, Adhesives and Coatings Div., 411
Piquette Ave., Detroit 2, Mich.

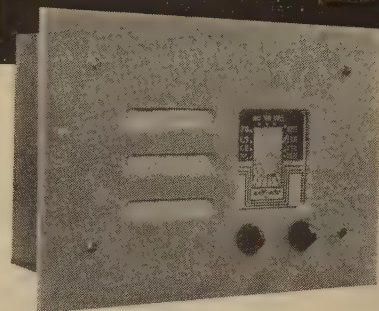
The 3-M line of adhesives for ceramic wall or
floor tile, rubber or vinyl tile, and decorative
laminates. Specifications and installation in-
structions.

- 161. KITCHEN CABINETS.** Specifications folder,
Mullins Mfg. Corp., Dept. HH, Warren, Ohio.
4 pp. 8 1/2" x 11"

Dimensions of all units in the Youngstown
steel kitchen line.

continued on p. 268

BUILT-IN RADIOS



... Only 3 7/8" Deep!

- Fits in standard 4" partition
- Excellent tone and selectivity
- Installed as easily as any electric outlet
- For kitchen, bath, bedroom, etc.
- Colored plastic panels
- Approved by Underwriters'
- Retail for **\$43.50** less panels



Write today for specifications
and low builder prices.

(Dealer inquiries invited)

FLUSH-WALL

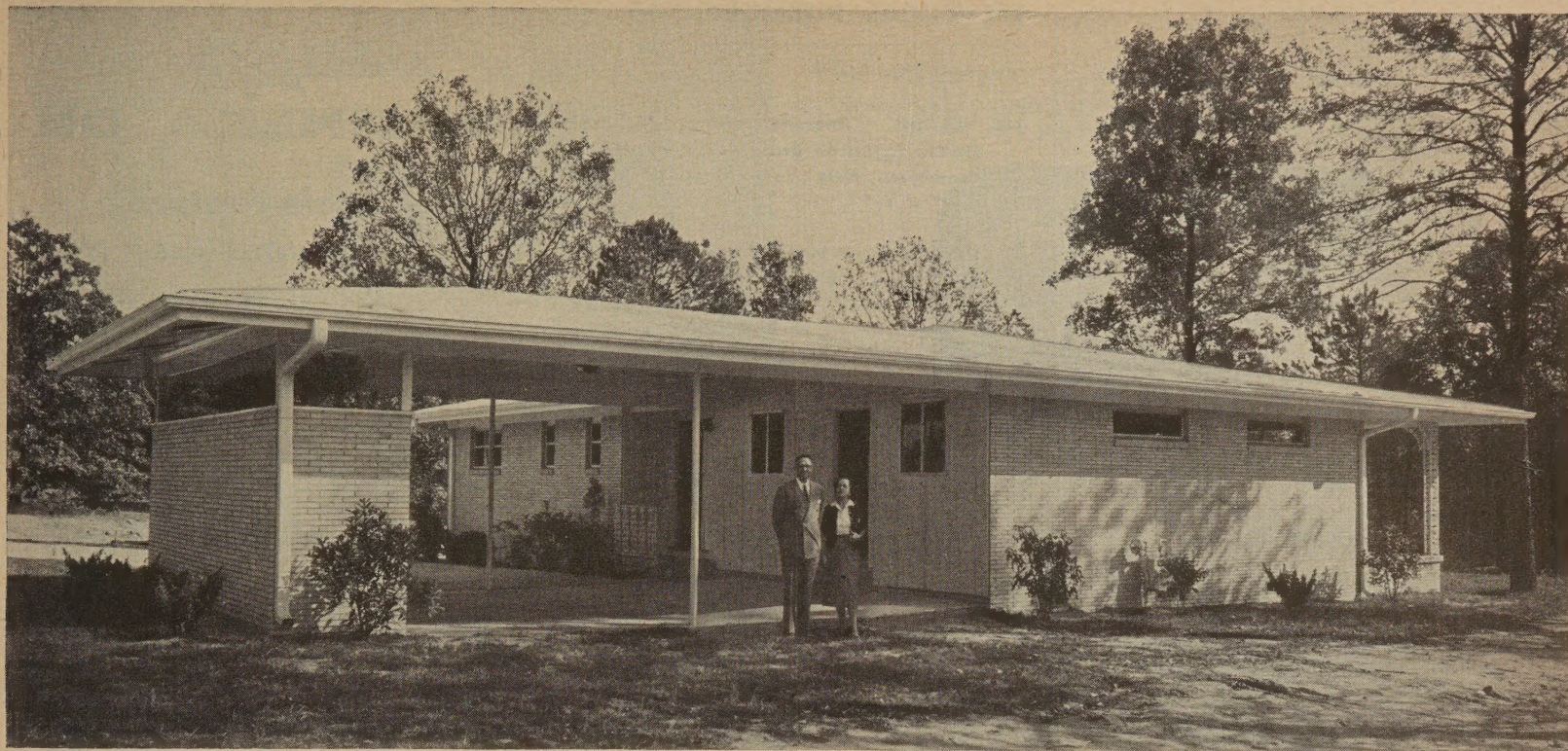
RADIO COMPANY

1012 HH 6 Cleveland St., Clearwater, Fla.

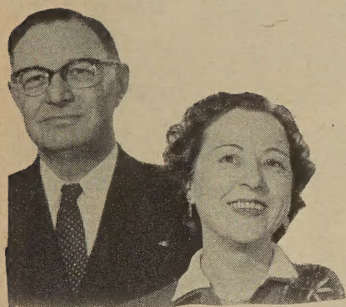
Coming in May

**house+home's
annual**

**DIRECTORY
OF
HOME SELLING
FEATURES**



"Low Cost G-E Remote Control Wiring helped us pre-sell our houses"

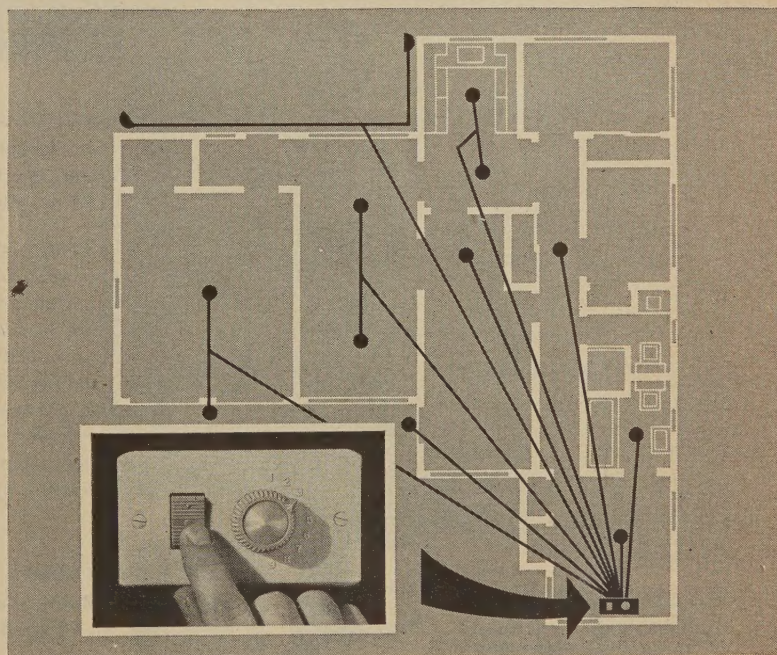


Elbert and Marie Fausett of Fausett & Co., Little Rock, Arkansas used G-E remote control wiring in all 700 of the \$11,500-to-\$22,000 homes in their Broadmoor Addition. The Fausetts say, "G-E remote control helped us sell these houses before the foundations were poured."

Imagine being able to show a prospective buyer how he can control circuits from any convenient location—how he can turn on lights ahead of him, and turn them off behind him rather than stumble through the dark. Show his wife the selector switch (which the Fausetts have located at the bedside). Tell her of the convenience and the security of being able to control lights all over the house without even getting out of bed. With a twist of the dial she can turn off all forgotten lights, or floodlight both house and yard when she hears a noise at night. Tell them both that the low-voltage switches use only 24 volts, and are isolated from the 120-volt household power.

This dramatic sales feature cost the Fausetts only \$30.00 to \$37.50 more per home than regular wiring. The secret of this low cost is low voltage. The control circuits use lightweight easy-to-install 24-volt wires, color coded for easy identification. Relays do the actual switching of the 120-volt power, minimizing heavy cable installations. This way it is economical to provide each circuit with as many control points as desired.

For complete information on this dramatically convenient system of home wiring, write for the "G-E Remote Control Manual of Layout and Installation" to Wiring Device Department, General Electric Company, 53 Hathaway Street, Providence 7, Rhode Island.



(Variation of Broadmoor house)

The selector switch controls nine circuits from the bedroom.

Progress Is Our Most Important Product

GENERAL  ELECTRIC

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creates
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for
sliding glass
doors...



with colorful
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TECHNICAL PUBLICATIONS

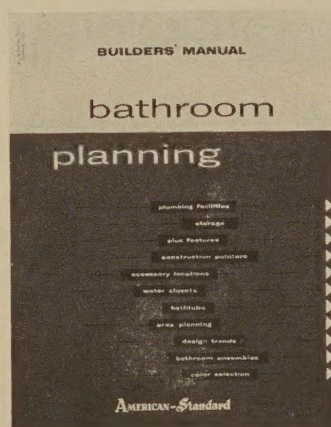
Continued from p. 264

- 162. HEATING.** Anaconda Preformed Panel Grids. American Brass Co., Dept. HH, 25 Broadway, New York 4, N. Y. 24 pp. 8½" x 11"

Suggestions for planning and installing radiant heating systems, using panel grids. Both ceiling and floor systems are described, plus engineering data on heat output, panel circuits, sizing mains and head pressures.

- 163. DOCUMENTARY MOVIES.** Anaconda PG's. American Brass Co., Dept. HH, Building Products Service Dept., Waterbury 20, Conn. 16 mm. sound film, 14½ minutes

Step-by-step operations of installing radiant heating systems. Available for trade or professional groups. Choice of desired dates suggested.



- 164. PLUMBING FIXTURES.** Bathroom Planning. American Radiator & Standard Sanitary Corp., Dept. HH, P.O. Box 1226, Pittsburgh 30, Pa. 24 pp. 8½" x 11"

This builder's manual will become a "must" reference work for every alert builder and architect. Prepared for NAHB's Research Institute, the booklet illustrates and discusses multiple use facilities, area planning, design trends and storage ideas. Drum-beating for their own products is unobtrusive, and every page is a possible gold mine, right down to p. 24, a color guide for matching walls, floors and accessories with colored fixtures.

- 165. GARAGE DOORS.** Barber-Colman Overdoor Guide. Barber-Colman Co., Dept. HH, Rockford, Ill. 16 pp. 8½" x 11"

Overhead doors, electric operators and radio control are included in this 1955 catalogue. Methods of preparing building openings, and space required for installations.

- 166. PLUMBING FIXTURES.** Allianceware, Inc., Dept. HH, Alliance, Ohio. 44 pp. 8½" x 11"

Color samples, dimensions and installation instructions for Alliance's porcelain-on-steel tubs, lavatories, closets and sinks.

continued on p. 276

Majestic INCINERATOR

A triple feature
for your project
or custom homes



AN EYE-CATCHING
MODERN APPLIANCE



INCINERATES ALL
BURNABLE TRASH



INCINERATES
GARBAGE, TOO



Sells Homes Faster

For a single extra convenience product that has triple buyer-appeal, try this Majestic complete disposal system in the homes you build.

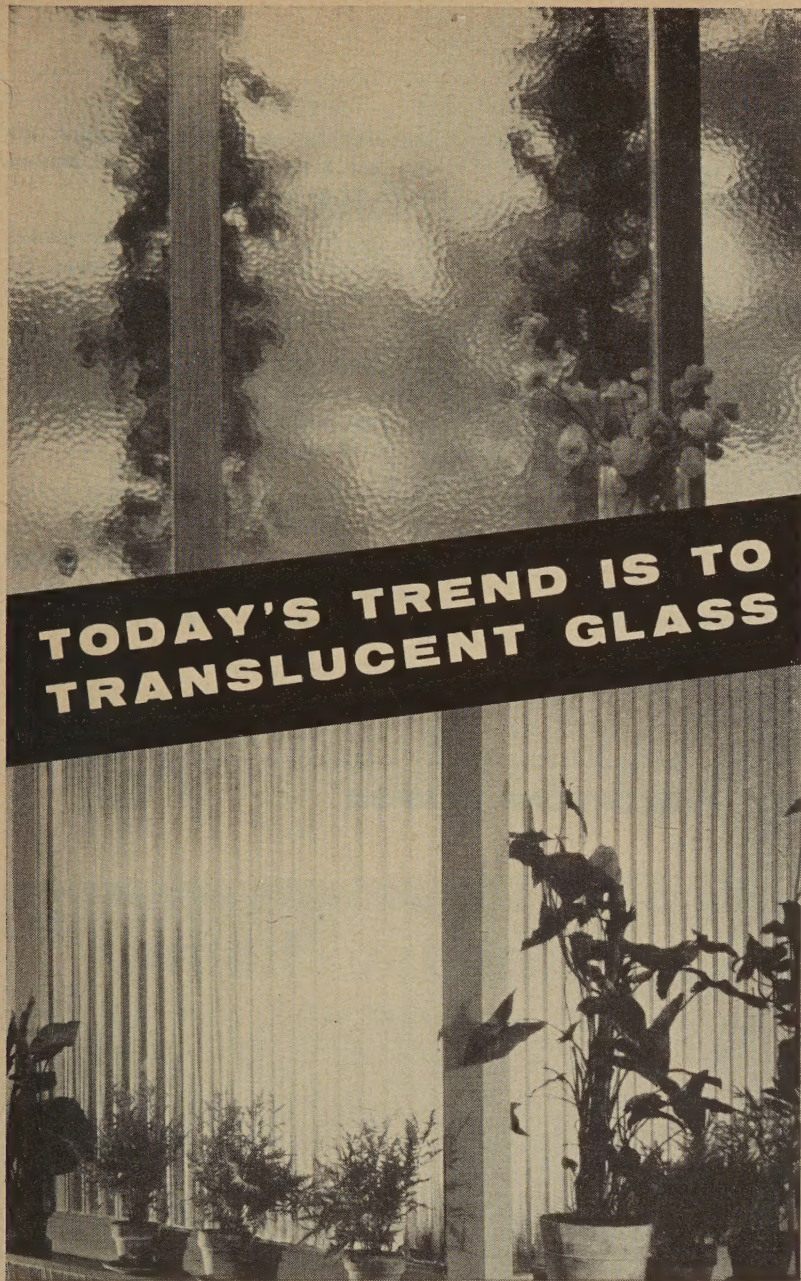
No home is truly modern if it lacks complete indoor disposal of both burnable trash and garbage. With a Majestic installed in basement, utility room, or kitchen, prospective home-buyers are thrilled to picture their rubbish woes ended by a silent flame.

Gas-fired models, AGA approved, use either natural, manufactured, or bottled gas for hooded-pilot drying and direct-flame incineration. Economical fuelless models are also a part of the complete Majestic line.

SEE YOUR MAJESTIC SUPPLIER
OR WRITE

The **Majestic Co., Inc.**

413-A Erie St., Huntington, Indiana



**TODAY'S TREND IS TO
TRANSLUCENT GLASS**

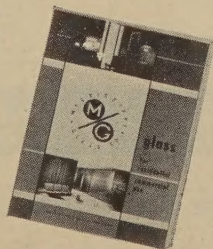
Popular Mississippi Patterns Combine Eye Appeal and Buy Appeal

Today's trend is to the more widespread use of translucent glass in contemporary homes. The unique ability of decorative, light diffusing glass to flood rooms with soft, flattering "borrowed light" is coupled with its innate beauty and interest. Its versatility recommends its use in areas throughout the house.

Translucent glass is also so practical . . . it never wears out . . . never requires painting . . . won't burn . . . cleans easily with a damp cloth.

For charm and originality that can't be duplicated in any other medium, specify Mississippi Glass. Available in a wide selection of patterns and surface finishes to satisfy every decorative inspiration. See your nearby distributor of quality glass.

Write for Catalog No. 55—
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Commercial Use." Address Dept. 9.



MISSISSIPPI Glass COMPANY

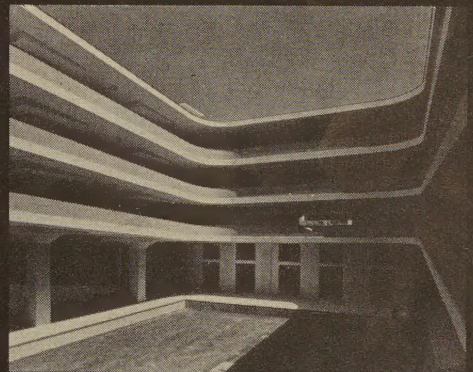
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NEW YORK • CHICAGO • FULLERTON, CALIF.

WORLD'S LARGEST MANUFACTURER OF ROLLED, FIGURED AND WIRED GLASS

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Inside view, during construction, showing how ramp accommodates customers to floor-level stall.



Standard Dry Wall Products, Inc.
NEW EAGLE, PENNSYLVANIA. U.S.A.

Electrical Heating...

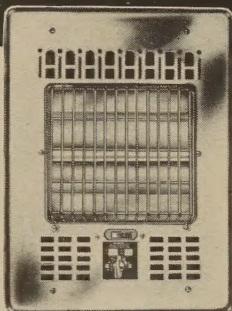
- ✓ For Every Room
- ✓ In Every Size House
- ✓ For Every Purse!

Automatic and Manual WALL HEETAIRES

AUTOMATIC RADIANT WALL HEETAIRE

... with the Built-In
Thermostat!

\$17⁹⁵
FROM LIST PRICE



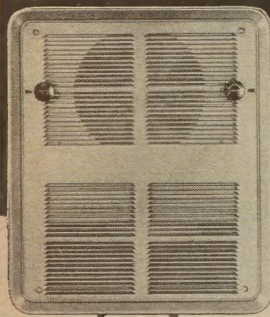
Series 240
HEETAIRES
1000 to 1500 Watts,
120 or 240 V., A.C.

OUR LOWEST PRICE EVER!

- Economical—turns on-off automatically
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- Glowing, infra-red penetrating heat
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Also Available in Manual Models, AC or DC

Beautifully Modern HEAVY DUTY



High Wattage Fan-Forced Wall Insert HEETAIRES

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FROM LIST PRICE

Series H-270-GT 3000 to 5000 Watts,
220-240 Volts A.C.

- Provide permanent or occasional heat in hard-to-heat rooms and buildings
- Turns self ON and OFF automatically
- Big 7 3/4" fan circulates heat throughout room or home
- Automatic Re-set "Safety Switch"
- Simple, easy installation (no venting)
- Safe, clean, controlled, circulated instant fumeless heat

PORTABLE MODELS \$60
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For literature, specifications and prices, write to

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145 Seneca St. • Dept. HH • Buffalo 3, N. Y.

Export Office: 15 Moore St., New York 4, N. Y.

TECHNICAL PUBLICATIONS continued from p. 268

167. BUILT-INS. Built-in Ovens. Martha Washington Distributing Co., Dept. HH, 163 Avenue A, Bayonne, N.J. 4 pp. 8 1/2" x 11"

Complete specifications and installation details of the new Martha Washington line of built-in gas and electric wall ovens and surface cooking units.

168. ACOUSTICAL TILE. Acoustical Tile Adhesive Handbook. A. Z. Bogert Co., Dept. HH, Ambler, Pa. 15 pp. 8 1/2" x 11"

A practical guide for applicators, builders, architects and specification writers. Text and diagrammatic illustrations include a thorough range of general practices and precautions.

169. BUILDING PRODUCTS. Catalogue 54-L. Leigh Building Products, Division Air Control Products, Inc., Dept. HH, Coopersville, Mich.

170. HEATING. Bell & Gossett Catalogue GK-954. Bell & Gossett Co., Dept. HH, Morton Grove, Ill. 26 pp. 8 1/2" x 11"

Nine pages of information on circulating pumps plus details on valves, fittings, air vents, etc., for forced hot water heating and chilled water cooling systems.

171. AIR CONDITIONING. Atmospheric Spray Cooling Towers. 3-B Series. Binks Mfg. Co., Dept. HH, 3122 Carroll Ave., Chicago 12, Ill. 12 pp. 8 1/2" x 11"

Construction details on Binks towers, including over-all dimensions.

172. LOCKS. Home Planner's Guide. Schlage Lock Co., Dept. HH, 2201 Bayshore Blvd., San Francisco, Calif. 8 pp. 8 1/2" x 11"

Full color illustrations of Schlage's sleek new line of locks and escutcheons.

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- f. Torat built-in shelf ☐
- g. U.S. Plywood patterns ☐
- h. Russ plumbing wall ☐
- i. Safway scaffolding ☐
- j. Carlton stainless steel sink ☐
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